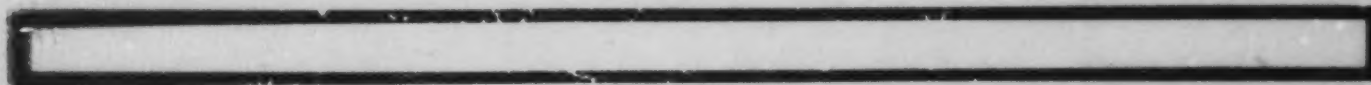


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Guidance for the Reregistration of
Manufacturing-Use and Certain End-Use
Pesticide Products Containing Diuron as the
Active Ingredient

(U.S.) Environmental Protection Agency
Washington, DC

30 Sep 83



U.S. Department of Commerce
National Technical Information Service

NTIS

Guidance for the
Reregistration of Manufacturing-Use
and Certain End-Use Pesticide Products

Containing

DIURON

As the Active Ingredient

ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDE PROGRAMS

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I. INTRODUCTION

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 3(g), as amended in 1978, directs the Environmental Protection Agency (EPA) to reregister all currently registered products as expeditiously as possible. Each registrant of a currently registered product who wishes to continue to sell or distribute that product in commerce must apply for reregistration.

This guidance document sets forth certain of the requirements for registration and reregistration of all manufacturing-use products (MPs) containing the subject chemical as the sole active ingredient. These requirements include: that certain scientific data be submitted and that certain standards of toxicity, composition, labeling, and packaging be met. Registrants of MPs are referred to all Sections and Tables for specific information regarding their responsibilities under this guidance document.

This guidance document also sets forth the data requirements for those end-use products which contain the subject active ingredient and for which the source of that active ingredient is (1) not registered with EPA or (2) produced by the registrant's firm, or a firm which has ownership in common with the registrant's firm, or (3) both (1) and (2). Registrants of such end-use products can exempt themselves from these requirements if they change their source of supply to a registered source, provided the source (i.e., registered active ingredient product) is obtained from a firm that does not share ownership in common with the registrant's firm. (If the end-use product registrant decides to switch sources, a new confidential statement of formula, EPA Form 8570-4, must be submitted to the appropriate Product Manager within 90 days of receipt of this guidance document.) Registrants of affected end-use products are referred to only Sections II, III, and VI and Table A for specific information regarding their responsibilities under this guidance document.

It should be noted that end-use products containing the subject active ingredient will not be reregistered at this time. Any necessary labeling changes will be implemented under the Agency's Label Improvement Program at a future time.

EPA will issue a notice of intent to cancel or suspend the registration of any currently registered product if the registrant fails to comply with the requirements set forth in this guidance document and with the requirements contained in subsequent information from EPA about compliance with certain data support requirements.

This guidance document has been prepared to provide registrants with specific information on how they may reregister their manufacturing-use products or maintain their end-use products' registration. (Refer to the cover letter's attachment for a listing of your affected products.) If for any reason you decide to request that the Agency discontinue the registration of any of your products subject to the registration requirements in this document, please notify the Product Manager named in the cover letter, within 90 days from the receipt of this document, that you wish to voluntarily cancel the registration(s). If you decide to maintain your product registration(s), you must provide the information described in the following pages within the timeframes outlined.

Registrants are reminded that Section 6(a)(2) of FIFRA requires you at any time to submit factual information raising concerns of possible unreasonable adverse effects of a pesticide. You should notify the Agency of interim results of studies in progress if those results show possible adverse effects.

This guidance document will be supplemented by EPA with additional information about compliance with data support requirements. In Monsanto v. Administrator, EPA was recently enjoined by the District Court for the Eastern District of Missouri from implementing in any way the "mandatory data licensing" aspects of §3(c)(1)(D) of FIFRA. EPA is assessing the implications of the injunction for the reregistration process. Because this situation is currently unresolved, EPA has decided to proceed with the requirements in this guidance package which do not relate to the "data licensing" issue and to supplement the package with additional guidance when circumstances permit.

I. REGULATORY POSITION AND RATIONALE

A. INTRODUCTION

This chapter describes the regulatory position of the Environmental Protection Agency ("the Agency") on diuron based on an evaluation of all registered manufacturing-use products (MUP's) containing diuron as the sole active ingredient. Future requests for registrations of substantially similar products will be covered by this standard. Dissimilar products will require amendments to the standard. This document provides the rationale for the Agency's position and the criteria for registration. It also discusses labeling requirements and tolerances.

"Diuron" is the accepted common name for the compound, 3-(3,4-Dichlorophenyl) 1,1-dimethylurea recognized by the American National Standards Institute. Trade and other names used for diuron include: Cekiuron®, Dailon®, Diater®, Di-on®, Diurox®, Diurol®, Drexel Diuron 4L®, Dynex®, Karmex®, Unidron®, Urox® and Vonduron®. The Chemical Abstracts Service (CAS) Registry number is 150-68-5. The Office of Pesticides Program's Internal Control Number (EPA Shaughnessy number) is 035505.

B. USE PROFILE

Diuron is a substituted urea herbicide for the control of a wide variety of annual and perennial broadleaved and grassy weeds on both crop and noncrop sites. Usually, diuron is applied to the soil prior to germination of weed seeds or when weeds are in an active growth stage. Adequate moisture must be present to allow movement of the herbicide into the root zone. Diuron also has a limited contact action and is normally applied with a surfactant when used in this manner. The mechanism of action is the inhibition of photosynthesis. Diuron is registered for use on numerous crop sites such as forage crops, field crops, fruits, vegetables, nuts, and ornamental crops. In non-crop applications, diuron is used on industrial sites, on rights-of-way, around farm buildings, and on irrigation and drainage ditches.

Diuron was patented by (ICI) and (Merck) in 1956, (US Patent No. 2,655,445 and 2,768,971) and was first registered for use in 1966. Technical diuron is currently being produced in the United States by E. I. duPont de Nemours and Company.

Diuron is available as a technical material, at 95-98% active ingredient and as a manufacturing use product containing 80% diuron for formulation of diuron end-use formulations or as manufacturing use products. As a sole active ingredient diuron is available in wettable powder, granular, flowables, pelleted/tableted, liquid suspensions, and soluble concentrate formulations.

C. REGULATORY POSITION

Based on a review and evaluation of the available data and other relevant information on diuron, the Agency has made the following determinations:

1. Manufacturing-use pesticide products containing diuron as a sole active ingredient may be registered for sale, distribution, formulation and use in the United States, subject to the terms and conditions specified in this standard. Applicants having products not conforming to this standard must apply to amend the document so those products containing diuron may be registered and reregistered under this standard. Mixtures and end-use products containing diuron are not covered under this standard.
2. Available data do not show that any of the risk criteria listed in Section 162.11(a) of Title 40 of the U.S. Code of Federal Regulations have been met or exceeded for the uses of diuron specified in this standard.
3. Since studies of linuron (a similar substituted urea compound to diuron) have exhibited testicular adenomas in rats and liver cell adenomas in female mice, the protocols for related studies of diuron should reflect the concerns raised by the linuron data. Currently, the Agency is reviewing the positive oncogenic response of linuron in the rat testes and mouse liver.
4. The Agency believes that the use of diuron on irrigation and drainage ditches in certain states is a food use because of the potential for residues to be found in the irrigated crop. If this use is to be approved, diuron residue data and/or other data demonstrating that such use will or will not result in residues in water or in crops receiving irrigation water will be required. If residues occur in crops, tolerances will be required.
5. Data to support the establishment of reentry protection standards are not required because the Agency has determined that the criteria for 40 CFR § 158.140 have not been met, based on the use patterns and available toxicology data for diuron.
6. During the next year, the Agency will propose changes in the tolerance levels of diuron in or on the commodities listed in 40 CFR, Part § 180.106.
7. Registrants must provide or agree to develop additional data, as specified in the tables attached to this standard, in order to maintain existing registrations or to permit new diuron registrations.

D. REGULATORY RATIONALE

The Agency has determined the following:

1. The available data indicate that technical diuron has low oral and dermal toxicities, and primary dermal and eye irritation. The toxicity categories assigned to diuron are III for oral and dermal toxicities and IV for dermal and eye irritation respectively.

Subchronic dermal testing is waived because of low toxicity shown by the acute oral and dermal studies. The requirement for a subchronic inhalation study is being deferred until an acute inhalation study has been completed.

In a two-year chronic feeding study(00017764), male and female rats were given diets containing 0, 25, 125, 250, and 2,500 ppm diuron. The authors noted slight anemia, enlarged spleens, increased erythro-genic activity in bone marrow, and abnormal pigments in the blood of groups fed 125 ppm or more. The no-observed-effect-level was 25ppm in rats. No evidence of tumorigenicity was found.

A two-year feeding study(00017763) in male and female dogs was done at levels of 0, 25, 125, 250, and 1,250 ppm diuron in the diet. The 1,250 ppm dose caused weight loss, depressed red cell counts, erythro-genic activity in bone marrow, elevated liver weight, increased pigment deposition in liver cells. Also, abnormal pigments were found in the blood of males at levels higher than 25 ppm and females at levels above 125 ppm. The no-observed-effect-level in dogs was 25 ppm. No evidence of tumorigenicity was found.

However, because of diuron's similarity to linuron, whose studies have shown testicular adenomas in rats and liver cell adenomas in female mice, specially designed studies are needed to fulfill the existing oncogenic data gap for diuron. The protocols for these studies need to consider the ability to detect increases in testicular interstitial cell adenomas in the strain of rats utilized and the dose response at high levels for the mouse.

2. Since diuron is slightly toxic to birds (avian acute oral study ($>2,000$ mg/kg) GS0046-010), its uses are not expected to affect avian wildlife.

There are sufficient data to characterize the acute toxicity as moderate to freshwater fish and highly toxic to some invertebrates. Chronic toxicity to freshwater invertebrates is also supported by adequate data.

There are insufficient data to characterize the acute and chronic toxic effects of diuron on estuarine fish, shrimp, and oysters. When additional ecological effects data are submitted, a complete hazard assessment can be made. An aquatic field study may be needed for the aquatic uses pending the outcome of the environmental fate studies.

3. The available environmental fate data are insufficient to fully assess the potential for exposure of humans and non-target organisms to diuron. When additional studies are submitted, a complete environmental exposure assessment can be made.
4. The available diuron product chemistry data are insufficient to fully assess the chemical at this time. The data gaps outlined in the product chemistry data tables are tests needed to adequately support the registration of a diuron product.

5. It is not the Agency's policy to cancel or to withhold registration merely because data are missing or inadequate (See Sections 3(c)(2)(B) and 3(C)(7) of the FIFRA). Rather, publication of this standard provides a mechanism for identifying data needs for registration under the standard and allows for the upgrading of labels during the period in which the required data are being developed. These data will be reviewed and evaluated when they are received and the Agency will determine at that time whether they will affect the registration(s) of diuron.

E. CRITERIA FOR REGISTRATION UNDER THIS STANDARD

To be subject to this standard, products must meet the following conditions:

1. Contain diuron as the sole active ingredient. and,
2. Conform to the acute toxicity limits, product composition, and use pattern requirements listed in Section F of this document.

The applicant for registration or reregistration of products subject to this standard must comply with all terms and conditions described in it, including committing to fill data gaps on a schedule agreed to by both this agency and the applicant. All applicants for registration under this standard must follow the instructions contained in this standard and complete and submit the appropriate forms within the time specified.

F. ACCEPTABLE RANGES AND LIMITS

1. Product Composition Standard

Technical grade products must contain at least 95 percent diuron as the sole active ingredient. Each manufacturing-use product formulation proposed for registration must be fully described with an appropriate certification of limits. In addition, the active ingredient found in the manufacturing-use diuron products must be substantially similar to that in currently registered technical products. Any manufacturing-use product not meeting these requirements will be considered a new product and will not be registerable under this standard.

2. Acute Toxicity Limits

The Agency will consider registration of technical grade and manufacturing-use products containing diuron with toxicity category III for acute oral and dermal toxicities and toxicity category IV for dermal and eye irritation, provided that the labeling of those products bear appropriate precautionary statements.

3. Use Patterns

To be registered under this standard, manufacturing-use products containing diuron may be labeled for formulation only into end-use products for herbicides used for the control of a wide variety of annual and perennial broadleaved and grassy weeds on both crop and noncrop sites. Diuron is registered for use on numerous crop sites such as forage crops, field crops, fruits, vegetables, nuts, and ornamental crops. In noncrop applications, diuron is used on industrial sites, on rights-of-way, around farm buildings, and on irrigation and drainage ditches.

G. REQUIRED LABELING

All technical grade, manufacturing-use, and end-use products containing diuron must bear appropriate labeling stating the sites of use. Other portions of the guidance package contain specific information regarding label requirements as specified in 40 CFR, § 162.10.

In Addition, the following environmental hazard statement must appear on all manufacturing-use product labels:

"This pesticide is toxic to aquatic invertebrates. Do not discharge into lakes, streams, ponds, or public water unless in accordance with an NPDES permit. For guidance, contact your Regional Office of the Environmental Protection Agency".

H. TOLERANCE REASSESSMENT

For diuron, the present Theoretical Maximum Residue Contribution(TMRC) is 0.68325 mg/day/1.5 kg diet and it presently amounts to 182% of an Acceptable Daily Intake (ADI) of mg/kg/day which for a 60 kg person is 0.3750 mg/day.

A reassessment of the diuron tolerances indicates that those originally set for certain commodities in 40 CFR, § 180.106 were too high. The Agency will propose the following reduction of tolerances for apples, citrus fruits, corn in grain or ear form (including sweet corn, field corn and popcorn), potatoes and wheat to a uniform level of 0.6 ppm, and those for meat, fat and meat by products (except liver and kidney) of cattle, goats, hogs, horses, and sheep to 0.2 ppm, with liver and kidney unchanged at 1.0 ppm. These new levels are roughly equivalent to double the maximal observed residue values from the established uses of diuron. Barley, oats, rye and sorghum grains should in the interest of consistency, be reduced to 0.6 ppm at the same time. In this case the TMRC would be reduced to 103% of the ADI. This option is better suited to enforcement and amenable to crop grouping.

A new tolerance application on nectarines is being reviewed by the Agency.

Presently, in the United States tolerances are established for diuron in or on the commodities listed below:

0.1 ppm (Negligible residues) in Bananas, Nuts, and Peaches;

0.5 ppm in Papayas;

1.0 ppm in Apples; Artichokes; Barley grain, Blackberries, Blueberries, Boysenberries, Fat of cattle, goats, hogs, horses, and sheep; Meat of cattle, goats, hogs, horses, and sheep; Meat Byproducts of cattle, goats, hogs, horses, and sheep; Citrus fruits; Corn, field ear; Corn grain; Popcorn, ear; Sweetcorn, ear; Cotton, seed; Currants; Dewberries; Gooseberries; Grapes; Huckleberries, Loganberries; Oats grain; Olives; Pears; Peas; Pineapple; Potatoes; Raspberries; Rye grain; Sorghum grain; Sugarcane; Vetch, seed; and Wheat grain;

2.0 ppm in Alfalfa; Barley forage, hay, and straw; Clover forage and hay; Corn fodder and forage; Popcorn fodder and forage; Sweetcorn fodder and forage; Grass crops and grass hay, (except Bermuda grass and Bermudagrass hay); Rye forage, hay, and straw; Pea forage and hay; Peppermint hay; Sorghum forage and fodder; Oats forage, hay, and straw; Trefoil, birdsfoot forage and hay; Vetch forage and hay; Wheat forage, hay, and straw.

4.0 ppm (food additive) in Dried citrus pulp;

7.0 ppm in Asparagus; and Bermudagrass and Bermudagrass hay.

EPA Index to Pesticide Chemicals

h035505

DIURON*

TYPE PESTICIDE: Algaecide; Herbicide

FORMULATIONS: Tech (95%, 97%, 98%); FI (80%); G (0.4%, 0.8%, 1%, 1.25%, 1.45%, 2%, 2.4%, 2.5%, 3%, 4%, 5%, 6%, 8%, 20%); P/T (8%, 20%); WP (1.25%, 27%, 40%, 63.2%, 80%); FIC (0.6 lb/gal, 0.9 lb/gal, 1.5 lb/gal, 2.8 lb/gal, 4 lb/gal)

+

GENERAL WARNINGS AND LIMITATIONS: A partially selective herbicide and algaecide used to control a variety of weeds on crop and noncrop sites. It is primarily soil active and moisture in the form of rainfall or irrigation is necessary to move the chemical into the root zone of weeds. Moisture should be available within 2 weeks after application. The chemical has some contact activity and application with a surfactant will control emerged weeds in certain situations. Contact sprays should be used only when weeds are young, succulent, and growing under conditions of high humidity and warm temperature. The effectiveness and duration of weed control depends on the uniformity of application, soil type and environmental conditions. Well established weeds should be eliminated prior to application. Correct dosage will vary with soil texture. Use the lower dosages on coarse soils (low in clay and organic matter) and the higher dosages on fine soils (high in clay or organic matter). Unless otherwise specified, do not use on sand, loamy sand, gravelly soils or exposed subsoils; nor cultivate after application. Unless otherwise directed, do not replant treated areas to any crop within 2 years after last application. Apply in 25 to 40 gallons of water per acre by ground or 5 to 10 gallons by air.

Livestock Tolerances:

1 ppm in meat, fat and meat byproducts of cattle, goats, hogs, horses and sheep.

TIME REQUIRED FOR CONTROL: Several days to several weeks.

PHYTOTOXICITY TO TARGET WEEDS: Chlorosis, wilting and death.

PHYTOTOXICITY TO CROPS: Not located.

MODE OF ACTION: Disruption of the Hill reaction of photosynthesis and other metabolic processes.

BROADLEAF WEEDS CONTROLLED:

@PBFADAA
@PCQBIBE
@PZAAABP
@PBFDCBC
@PAAAAAE
@PEHAGAA

ageratum
alfalfa (volunteer)
annual groundcherry
annual sowthistle (a)
annual weeds
buttercup

List continued on the next page.

*Karmex

3-(3,4-dichlorophenyl)-1,1-dimethyl urea

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I-035505-1

EPA Index to Pesticide Chemicals

DIURON

BROADLEAF WEEDS CONTROLLED (continued)

@POAAABF	buttonweed	(a)
@PAZAAAC	chickweed	
@PBFDAQAA	cocklebur	
@PEUAPBB	corn speedwell	(a)
@PAZAMBA	corn spurry	
@PBFBIBB	dogfennel	
@PARABAA	fiddleneck	
@PBFBPBD	fragrant cudweed	(a)
@PARAJAA	gromwell	
@PBFCXAA	groundsel	
@PBFAAAC	hawksbeard	(a)
@PAAAAAH	herbaceous weeds	
@PEWAIBB	horsenettle	(a)
@PBFAYBA	horseweed	
@PAZAKBA	knawel	
@PEAAGAC	knotweed	
@PBDAIBA	kochia	(a)
@PBDAEAB	lambsquarters	
@PCYAEAA	loosestrife	
@PAAAABU	marigold	
@PEMAEAA	mexican clover	(a)
@PEAAGBO	pennsylvania smartweed	(a)
@PBKBFBA	pennycress	
@PBKAWAA	pepperweed	(a)
@PAAAABI	pigweed	
@PBFCCKBB	pineappleweed	(a)
@PDTABAA	pokeweed	(a)
@PDAAJBF	prickly sida	
@PAAAABP	purslane	
@PBF AEAA	ragweed	
@PBFBFBA	red tasselflower	
@PCQBSAA	sesbania	
@PBKAHBA	shepherdspurse	
@PCQAMBE	sicklepod	
@PEAAGAD	smartweed	
@PBFAOBA	spanishneedles	(a)
@PAAAAAV	summer annual weeds	
@PBFCEBB	tall lettuce	
@PBGAFBL	tall morningglory	
@PBKANBB	tansymustard	
@PDAABBB	velvetleaf	
@PEAAGBH	wild buckwheat	
@PBKAFBE	wild mustard	
@PBKBABA	wild radish	(a)
@PAAAAAW	winter annual weeds	

(a) Use the higher dosages.

EPA Index to Pesticide Chemicals

DIURON

GRASSES AND OTHER MONOCOTS CONTROLLED:

@PCACKBA	annual bluegrass	
@PCABKAB	annual lovegrass	(a)
@PCAAIBB	annual sweet vernalgrass	
@PCABHBB	barnyardgrass	
@PCAAZBA	bermudagrass	
@PCABFAA	crabgrass	
@PBEABAA	dayflower	
@PCACUAA	foxtail	
@PCABIBA	goosegrass	
@PCACEBH	guineagrass	
@PCABZBA	italian ryegrass	
@PCACWBC	johnsongrass	
@PCACWBG	johnsongrass (seedling)	(a)
@PCACEBG	maidencane	
@PBMADAA	nutsedge	(a)
@PCABBBB	orchardgrass	(a)
@PCABFBB	pangolagrass	
@PCAARBB	paragrass	
@PZAAAGC	prefergrass	
@PCAACBA	quackgrass	
@PCABMBB	rattail fescue	
@PCABYBB	red sprangletop	
@PCACDAA	ricegrass	(a)
@PCABZAA	ryegrass	(a)
@PCAAWAA	sandbur	(a)
@PCAAAAL	summer annual grasses	
@PCABRBA	velvetgrass	

(a) Use the higher dosages.

AQUATIC WEEDS CONTROLLED:

@PEOACBK	black willow
@PDLACBA	cabomba
@PZAAAFV	cabomba purcherrima
@PIGABAA	chara
@PAEADBB	coastal arrowhead
@PAEADBC	common arrowhead
@PFDABBD	common cattail
@PBBABBA	common coontail
@PBFALBB	eastern baccharis
@PECABAA	eichornia
@PKAAAAC	filamentous algae
@PCSABBB	floating bladderwort
@PDLAFBB	fragrant waterlily
@PDJABBC	hollyleaf naiad
@PCSABBF	horned bladderwort

List continued on the next page.

EPA Index to Pesticide Chemicals

DIURON

AQUATIC WEEDS CONTROLLED (continued)

@PFFARBE	hydrocotyle bonariensis
@PIMABAA	hydrodictyon
@PEEABBG	illinois pondweed
@PCSABBA	leafy bladderwort
@PDNAEBC	ludwigia peploides
@PDNAEBB	ludwigia peruviana
@PCACEBG	maidencane
@PFDABBA	narrowleaf cattail
@PDLAEAA	nuphar
@PCACEBR	panicum purpurascens
@PCDABBA	parrotfeather
@PDNADBC	perennial waterprimrose
@PECADBA	pickerelweed
@PIIACAA	pithophora
@PKAAAAB	planktonic algae
@PECADBB	pontederia lanceolata
@PCSABBC	purple bladderwort
@PEPACBA	salvinia
@PAEADBF	slender arrowhead
@PDJABBA	slender naiad
@PBMAEBA	slender spikerush
@PCLABBC	soft rush
@PFDABBB	southern cattail
@PDJABBB	southern naiad
@PCABTBA	southern watergrass
@PCACEBK	torpedograss
@PZAAAFW	utricularia fimbriata
@PCSABBE	utricularia resupinata
@PEOACBM	wards willow
@PCACFBF	water paspalum
@PFFARBC	water pennywort
@PECABBA	waterhyacinth
@PDNADAA	waterprimrose
@PEEABBC	waterthread pondweed

EPA Index to Pesticide Chemicals

DIURON

Site, Dosage
and Formulation
(lb a.i./A)

Tolerance, Use, Limitations

=
AGRICULTURAL CROPS

General Warnings and Limitations: For best results, the soil should be well prepared and as free as possible from trash and clods. Unless otherwise directed, do not use on alfalfa, apples, artichoke, barley (winter), bermudagrass pasture, citrus, cotton, grapes, oats, olives, papayas, peaches, pears, sorghum, sugarcane, walnuts and wheat (winter) where organic matter is less than 1 percent; or on blueberries, birdsfoot trefoil, caneberries, gooseberries, macadamia nuts and peppermint where organic matter is less than 2 percent. Do not use on any crop in Kern County, CA. Reduce dosage in proportion to band area actually treated.

/2300100
19001500

Alfalfa

2 ppm

General Information: Use in areas where alfalfa becomes winter dormant and in areas of CA (north of the Tehachapi Mountains) where alfalfa becomes semi-dormant. Treat only stands established for 1 year or more. Apply after alfalfa becomes dormant but before crop begins growth in the spring. Do not apply to seedling alfalfa or to alfalfa-grass mixtures. Do not apply to alfalfa under stress from disease, insect damage, shallow root penetration (such as on shallow hard pans), alkali spots, nor to flooded fields. May be applied by air.

--

AZ state label

Registration Number 010163-06393

\$2300115
&080.0006

1.20-2.40
(80% WP)

Use limited to AZ and NV. Dormant. Broadcast. Apply in the fall, no later than January.

&080.0006

1.20-2.40
(80% WP)

Use limited to CA. Dormant or semi-dormant. Broadcast. Apply in fall or winter, preferably before February. For control of established weeds, apply with an appropriate contact herbicide. Increase the dosage to 3.2 pounds per acre for volunteer alfalfa control.

&080.0006

0.80-1.60
(80% WP)

Use limited to eastern CO and KS. Dormant. Broadcast. Tansymustard control. Apply in fall or winter. Use the lower dosage shortly after weeds emerge and the higher dosage when weeds are 2 to 4 inches in height.

OR

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
<u>Alfalfa (continued)</u>	
&080.0006 1.60-2.40 (80% WP)	Use limited to eastern CO and KS. Dormant. Broadcast. Annual weed control. Apply in Febru- ary or March.
&080.0006 1.20-2.40 (80% WP)	Use limited to ID, OR, and WA. Dormant. Broadcast. Apply in the fall no later than mid- December. Increase the dosage to 3.2 pounds per acre for volunteer alfalfa control.
&080.0006 1.20-1.60 (80% WP)	Use limited to areas east of the Appalachian Mountains where alfalfa becomes winter dormant. Dormant. Broadcast. Apply in March or early April.
&080.0006 1.20-2.40 (80% WP)	Use limited to areas west of the Appalachian Mountains where alfalfa becomes winter dormant (excluding AZ, CA, eastern CO, ID, KS, NV, OR and WA). Dormant. Broadcast. Apply in March or early April.
/2204400 <u>Alta Fescue (seed</u> I9001500 <u>crop)</u>	N.F. (seed) 2 ppm (grass and hay) <u>General Information:</u> May be applied by air.
\$2204404 1.60 &080.0006 (80% WP)	Use limited to western OR. Postemergence. Broadcast. Apply to spring planted fields in the fall after October 15. Use only on vigorous stands planted before April.
&080.0006 1.60-3.20 (80% WP)	Use limited to western OR. Postemergence. Broadcast. Apply to established plantings at least 1 year old, from October 1 to November 15, soon after fall rains begin. In fields where straw is burned, spread unburned material before application and use the medium to high dosage range. Use the highest dosage to control peren- nial velvetgrass. Established weeds should be removed prior to treatment.

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)		<u>Tolerance, Use, Limitations</u>
/0400100	<u>Apple</u>	1 ppm Do not graze treated areas. <u>General Information:</u> Do not use on varieties grafted on full dwarf root stocks. Use only under trees established in the orchard for at least 1 year.
\$0400102 &080.0006	3.20 (80% WP)	Directed spray. Apply in the spring (March through May).
&080.0006	3.20 (80% WP)	Use limited to the Far West. Directed spray. Apply in the winter (December through February).
OR		
&080.0006	1.60 (80% WP)	Use limited to the Far West. Directed spray. Split application. Apply once postharvest, then repeat in the spring.
19900300 &080.0006	0.80-1.60 (80% WP)	Directed spray. Broadcast or band. Tank mix with terbacil. Apply in the spring or after harvest. Use only under trees established in the orchard for at least 2 years. Apply as a band treatment only where crop is grown under furrow irrigation or under raised berm flood irrigation. Do not treat trees planted in the bottom of irrigation furrows or trees grown under flat flood or basin irrigation.
F &040.0006	0.80-1.60 (40% WP)	Directed spray. Broadcast or band. Apply in the spring or the fall after harvest. Use only under trees established in the orchard for at least 2 years. Apply as a band treatment only where crop is grown under furrow irrigation or under raised berm flood irrigation. Do not treat trees planted in the bottom of irrigation furrows or trees grown under flat flood or basin irrigation. Formulated with terbacil.
/1301800	<u>Artichoke</u>	1 ppm
\$1301802 &080.0006	1.60-3.20 (80% WP)	Use limited to CA. Postemergence. Directed spray. Apply in late fall or early winter after last cultivation. Apply prior to weed germination or seedling emergence. Direct spray to base of plants and between crop rows. Avoid spray contact with crop plants.

EPA Index to Pesticide Chemicals

DIURON

	<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
/1600200 19001500	<u>Asparagus</u>	7 ppm <u>General Information:</u> Apply only to established plantings unless otherwise indicated. Do not apply to newly seeded fields or to plants with exposed roots. Use dosages of 1.6 pounds per acre or less on light, sandy soils or soils low in clay or organic matter, and 1.6 pounds per acre or more on soils high in clay or organic matter. May be applied by air.
	--	AZ state label Registration Number 010163-06393
\$1600202 &080.0006	1.60-3.20 (80% WP)	Use limited to the San Joaquin delta of CA. Pre-emergence. Broadcast or band. For use on newly planted crowns, planted deeper than 2 inches. The soil must be settled by rain or irrigation before application. Do not apply to soil with less than 2 percent organic matter. Use the lower dosage on clay loam and the higher dosage on peat soil.
&080.0006	0.80-3.20 (80% WP)	Preemergence. Broadcast or band. Apply before weeds become established, no earlier than 4 weeks before spears emerge and no later than the early cutting period. If cultivation extends into the cutting period, application may be delayed until immediately after the last cultivation. May be used in conjunction with the postharvest application if 2.4 pounds per acre is not exceeded in either application.
\$1600215 &080.0006	0.80-2.40 (80% WP)	Postharvest. Broadcast or band. Apply immediately after the final harvest, provided rainfall is expected.
&080.0006	3.20 (80% WP)	Use limited to irrigated areas in WA. Dormant. Broadcast or band. Apply in late November or December.

EPA Index to Pesticide Chemicals

DIURON

	<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
/0600200	<u>Banana</u>	0.1 ppm Do not graze treated areas. <u>General Information:</u> Do not apply more than 9.6 pounds per acre in a 12 month period. Sugarcane or pineapple may be planted in treated areas 1 year after the last application. Do not plant any other crop within 2 years after the last application.
\$0600202 &080.0006	1.20-2.40 (80% WP)	Preemergence. Band application between the row. Apply after planting. Do not apply to loose soil directly over the planting material.
&080.0006	2.40-4.80 (80% WP)	Postemergence. Directed spray. Avoid contact with crop plants. Use with a surfactant when weed growth is present. When weeds are tall or dense, remove before application. Repeat as needed, with at least a 6 week interval.
/2806300	<u>Barley (winter, drill-planted)</u>	1 ppm (grain) 2 ppm (forage, hay and straw)
\$2806302 &080.0006 I9001500	1.20-1.60 (80% WP)	Use limited to western OR and western WA. Pre-emergence. Broadcast. Apply as soon as possible after planting. Do not replant treated areas to any crop within 1 year after application. May be applied by air.
/2203800	<u>Bentgrass (seed crop)</u>	N.F. (seed) 2 ppm (grass and hay)
\$2203805 &080.0006 I9001500	2.00-2.40 (80% WP)	Use limited to OR. Preemergence. Broadcast. Apply soon after planting, before rainfall or irrigation, in the fall or spring, preferably early fall. Apply activated charcoal at a broadcast rate of 300 pounds per acre, sprayed in a 1 inch band directly over seed rows during planting. May be applied by air.

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DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)		<u>Tolerance, Use, Limitations</u>
/2201700	<u>Bermudagrass (newly sprigged)</u>	7 ppm (grass and hay) Do not graze or feed vegetation from treated fields to livestock within 70 days after application. <u>General Information:</u> Do not apply in areas where sprigs are planted less than 2 inches deep.
\$2201702 8080.0006	0.80-2.40 (80% WP)	Preemergence. Broadcast. Apply before weeds emerge.
OR		
8080.0006	0.40-0.80 (80% WP)	Preemergence. Broadcast. Annual weed control. Apply with a surfactant when weeds are less than 4 inches in height.
\$2201701 8080.0006	0.40-0.80 (80% WP)	Postemergence. Broadcast. Annual weed control. Apply with a surfactant when weeds are less than 4 inches in height. Exposed plant parts may be temporarily injured.
/2301100	<u>Birdsfoot Trefoil</u>	2 ppm (forage and hay)
\$2301115 8080.0006	1.60 (80% WP)	Use limited to western OR. Dormant. Broadcast. Apply from October 15 to December 15. Apply only to stands established for 1 year or more. Do not replant treated areas to any crop within 1 year after application.
/0100200	<u>Blackberry</u>	1 ppm <u>General Information:</u> Apply as a band application at the base of the crop row. Use only on plantings established for 1 year or more. Do not apply when crop roots are exposed or when berry crop is interplanted with fruit trees.
\$0100202 8080.0006	1.60 (80% WP)	Use limited to CA. Directed spray. Apply in October or November to control winter annuals, and repeat in late spring to control summer annuals. This is the preferred schedule.
OR		
8080.0006	2.40 (80% WP)	Use limited to CA. Directed spray. Winter annual and summer annual control. Apply in January or February. Effective in certain areas.

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation (lb a.i./A)</u>		<u>Tolerance, Use, Limitations</u>
/0100900	<u>Blueberry</u>	1 ppm <u>General Information:</u> Apply as a band application at the base of the crop row. Use only on plantings established for 1 year or more. Do not apply when crop roots are exposed or when berry crop is interplanted with fruit trees.
\$0100902 &080.0006	1.60 (80% WP)	Use limited to western OR and western WA. Directed spray. Apply in October or November to control winter annuals, and repeat in spring to control summer annuals. This is the preferred schedule.
OR		
&080.0006	2.40 (80% WP)	Use limited to western OR and western WA. Directed spray. Winter annual and summer annual control. Apply in January or February. Effective in certain areas.
&080.0006	1.60 (80% WP)	Use limited to NJ. Directed spray. Winter annual control. Apply in October, November or December.
&080.0006	1.60-3.20 (80% WP)	Use limited to IN, MI and OH. Directed spray. Apply in late spring, or use the lower dosage in the fall and repeat in the spring.
&080.0006	1.60 (80% WP)	Use limited to MA. Directed spray. Apply in late spring.
/0100300	<u>Boysenberry</u>	1 ppm <u>General Information:</u> Apply as a band application at the base of the crop row. Use only on plantings established for 1 year or more. Do not apply when crop roots are exposed or when berry crop is interplanted with fruit trees.
\$0100302 S0100202		Use limited to CA. Directed spray. Refer to Blackberry for use and limitation information.

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DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)		<u>Tolerance, Use, Limitations</u>
/0100100	<u>Caneberries</u>	1 ppm (blackberry, boysenberry, dewberry, loganberry, raspberry) <u>General Information:</u> Apply as a band application at the base of the crop row. Use only on plantings established for 1 year or more. Do not apply when crop roots are exposed or when berry crop is interplanted with fruit trees.
\$0100102 &080.0006	1.60 (80% WP)	Use limited to western OR and western WA. Direct-spray. Apply in October or November to control winter annuals, and repeat in spring to control summer annuals. This is the preferred schedule.
OR		
&080.0006	2.40 (80% WP)	Use limited to western OR and western WA. Direct-spray. Winter annual and summer annual control. Apply in January or February. Effective in certain areas.
/0200000	<u>Citrus Fruits</u>	1 ppm Do not graze treated areas.
	--	AZ state label Registration Number 010163-06393 FL state labels Registration Number 002342-06975 Registration Number 006720-06227
\$0200062 &080.0006	32.00 (80% WP)	Broadcast. For use in ditches and canals adjacent to citrus groves. Apply in the spring before weed growth begins or after removal of vegetation. Treatment may be followed by spot applications to control difficult weeds. Do not treat water furrows between beds in bedded groves.
/2800600	<u>Corn, Field</u>	1 ppm (grain and ears) 2 ppm (forage and fodder)
	--	AZ state label Registration Number 010163-06393

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DIURON

Site, Dosage
and Formulation
(lb a.i./A)

Tolerance, Use, Limitations

Corn, Field (continued)

\$2800602 8080.0006	0.53-0.80 (80% WP)	Use limited to AR, LA, MS, and TN. Preemergence. Broadcast or band. Apply after planting. Corn should be planted at least 1.5 inches deep. Do not replant to any crop except corn or cotton within 4 months if banded or 6 months if broadcast.
8080.0006	0.60-0.80 (80% WP)	Postemergence. Directed spray. Apply when corn is 20 inches or more in height and weeds are 3 inches or less in height. Use the lower dosage in combination with non-pressurized nitrogen solutions and the higher dosage with a surfactant. Do not replant to any crop within 1 year, with the exception of corn, cotton, or grain sorghum, which may be planted the following spring.
/2800700	<u>Cotton</u>	1 ppm (cottonseed) <u>General Information:</u> Do not replant treated areas to any crop within 1 year after last application with the exception of cotton, corn, or grain sorghum which may be planted the following spring. Treated areas may also be replanted to soybeans in spring provided the treatment was not post-emergence broadcast. Single band applications may be followed by any crop within 4 months after last application. Cotton may be replanted in treated soil if initial seeding fails. If possible, avoid disturbing the original bed, but shallow cultivation may be used. Do not relist nor move soil into the original planting area. Plant at least 1 inch deep and do not retreat with preplant or preemergence applications. During a single crop season, do not exceed the following amounts of active ingredient per acre: 0.80 pounds on loamy sand; 1.20 pounds on sandy loam; 1.60 pounds on clay loam; 2.20 pounds on clay.

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AZ state label
Registration Number 010163-06393
LA state label
Registration Number 006865-09320

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DIURON

Site, Dosage
and Formulation
(lb a.i./A)

Tolerance, Use, Limitations

Cotton (continued)

\$2800702	0.80-2.00	Use limited to AZ and CA. Preplant. Broadcast. Apply after pre-irrigation and final seedbed preparation. Remove treated soil from the top of the beds before planting and plant in moist, untreated soil. Return treated soil to beds after cotton emerges, when irrigation furrows are reformed. Weed control in furrow bottoms may be reduced if deep furrows are made early, or when more than 2 furrowing-out operations are made prior to layby. May be applied by air.
&080.0006	(80% WP)	
I9001500		
I9001500	0.53-1.00	Use limited to AZ and CA. Preplant. Broadcast. Use subsequent to preplant trifluralin application. Apply after pre-irrigation and final seedbed preparation. Remove treated soil from the top of the beds before planting and plant in moist, untreated soil. Return treated soil to beds after cotton emerges, when irrigation furrows are reformed. Weed control in furrow bottoms may be reduced if deep furrows are made early, or when more than 2 furrowing-out operations are made prior to layby. Sequential treatment with trifluralin and diuron should be used in conjunction with a standard fungicide seed treatment and a supplemented soil fungicide program. May be applied by air.
&080.0006	(80% WP)	
I9001500	0.53-1.60	Use limited to states other than AZ and CA. Pre-emergence. Broadcast or band. Apply to flat or raised seedbeds during or immediately after planting. Do not treat cotton in deep furrows. Shallow soil incorporation (0.25 inch or less) usually improves results, particularly if moisture is insufficient to activate the chemical or if soil crusting occurs before cotton emerges. Do not use on soils with less than 1 percent organic matter. May be applied by air.
&080.0006	(80% WP)	
&102.8014	(2.8 lb/gal FlC)	

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
<u>Cotton (continued)</u>	
I9001500 0.27-0.80 &080.0006 (80% WP)	Use limited to states other than AZ and CA. Pre-emergence. Broadcast or band. Use subsequent to preplant application of trifluralin. Apply to flat or raised seedbeds during or immediately after planting. Do not treat cotton in deep furrows. Shallow soil incorporation (0.25 inch or less) usually improves results, particularly if moisture is insufficient to activate the chemical or if soil crusting occurs before cotton emerges. Sequential treatments with trifluralin and diuron should be used in conjunction with a standard fungicide seed treatment and a supplemental soil fungicide program. Do not use on soils with less than 1 percent organic matter. May be applied by air.
I9900300 0.20-0.40 &080.0006 (80% WP) &102.8014 0.20-0.39 (2.8 lb/gal F1C)	Postemergence. Directed spray. Apply as a band early in the season when weeds are 2 inches or less in height. Cotton should be at least 6 inches in height, and western irrigated cotton should be at least 12 inches in height. Apply with a surfactant. Use the lower dosage for pigweed control and the higher dosage for annual grass control. Two applications may be made if necessary. May be tank mixed with disodium methanearsonate. Do not apply the tank mix after first bloom.
F &100.6014 0.30 (0.6 lb/gal F1C)	Postemergence. Directed spray. Broadcast or band. To control emerged weeds, apply when cotton is 6 inches in height to first bloom. Application may be repeated in 1 to 3 weeks if needed. Formulated with monosodium acid methanearsonate.
&080.0006 0.80-1.20 (80% WP) &104.0014 0.75-1.00 (4 lb/gal F1C)	At layby. Directed spray. Apply after final cultivation when cotton is 12 inches or more in height (20 inches or more for pima s-2). For control of emerged annual weeds up to 4 inches in height, apply the wettable powder with a surfactant. On irrigated land, control will be optimized by irrigating within 3 to 4 days after application.

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
<u>Cotton (continued)</u>	
&080.0006 0.80-1.60 (80% WP)	Use limited to AZ and CA. At layby. Directed spray. Apply after final cultivation when cotton is 12 inches or more in height (20 inches or more for pima s-2). For control of emerged annual weeds up to 4 inches in height, apply the wettable powder with a surfactant. On irrigated land, control will be optimized by irrigating within 3 to 4 days after application.
&104.0014 0.75-1.50 (4 lb/gal F1C)	
&080.0006 0.40-0.60 (80% WP)	At layby. Directed spray. Apply after final cultivation to emerged weeds up to 4 inches in height when cotton is 12 inches or more in height (20 inches or more for pima s-2). Apply with a surfactant. Repeat application if needed.
/0100400 <u>Dewberry</u>	1 ppm <u>General Information:</u> Apply as a band application at the base of the crop row. Use only on plantings established for 1 year or more. Do not apply when crop roots are exposed or when berry crop is interplanted with fruit trees.
\$0100402 S0100202	Use limited to CA. Directed spray. Refer to Blackberry for use and limitation information.
/0101300 <u>Gooseberry</u>	1 ppm <u>General Information:</u> Apply as a band application at the base of the crop row. Use only on plantings established for 1 year or more. Do not apply when crop roots are exposed or when berry crop is interplanted with fruit trees.
\$0101302 S0100102	Use limited to western OR and western WA. Directed spray. Refer to Caneberries for use and limitation information.

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DIURON

	<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
/0101400	<u>Grapes</u>	1 ppm <u>General Information:</u> Apply as a band to grape rows. Do not apply to vines with trunks less than 1.5 inch in diameter or injury may result. On soils low in clay or organic matter (1 to 2 percent), severe plant injury may occur if heavy rainfall or more than 1 inch of irrigation occurs soon after treatment.
\$0101402 \$080.0006	1.60-4.80 (80% WP)	Use limited to areas east of the Rocky Mountains. Band application. Apply in the spring prior to annual weed germination. Use only in vineyards established for at least 3 years.
\$080.0006	2.40-3.20 (80% WP)	Use limited to areas west of the Rocky Mountains. Initial band application. Apply in November, December or January. Use only in vineyards established for at least 3 years.
\$080.0006	1.60 (80% WP)	Use limited to areas west of the Rocky Mountains. Band application. Apply in November, December or January as an annual application subsequent to the initial treatment. Use only in vineyards established for at least 3 years.
\$080.0006	6.40-9.60 (80% WP)	Use limited to NY and PA. Band application. Perennial grass control. Apply in the spring to ridged soil (2 to 4 inches high) under the trellis. Band width should not exceed 30 inches. Use only in vineyards established for at least 4 years. Do not apply more than once every 4 years. Use only on heavy soils such as loams, silt loams or clay loams. Do not use in areas where grape roots are shallow or exposed because of high bedrock, poor drainage, or erosion, as crop injury may result.

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DIURON

	<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
/0200200	<u>Grapefruit</u>	1 ppm Do not graze treated areas. <u>General Information:</u> Use only in groves established for at least 1 year. Application may be made at any time of the year when sprinkler or flood irrigation can be used to activate the herbicide. Do not apply to home plantings. Do not apply under trees that have been subjected to freezing within 6 months.
	--	AZ state label Registration Number 010163-06393 TX state labels Registration Number 006735-04812 Registration Number 006735-04813 Registration Number 006735-04814 Formulated with bromacil.
F	\$0200202 2.40-3.20 &080.0006 (80% WP)	Use limited to AZ (except Yuma area) and CA (except Imperial and Coachella Valleys). Directed spray. Apply in late fall or early winter shortly after grove has been laid up in final form. Subsequent annual applications of 1.60 to 2.40 pounds per acre will usually give adequate control.
	&080.0006 1.60 (80% WP)	OR Use limited to AZ (except Yuma area) and CA (except Imperial and Coachella Valleys). Directed spray. Apply in October or November and repeat in March or April. Subsequent annual applications of 1.60 to 2.40 pounds per acre will give adequate control.
&080.0006	3.20-6.40 (80% WP)	Use limited to FL (except Martin, Palm Beach, Broward, and Dade counties). Directed spray. Apply when seasonal rains are expected.
	&080.0006 2.40-3.20 (80% WP)	OR Use limited to FL (except Martin, Palm Beach, Broward, and Dade counties). Directed spray. Apply when seasonal rains are expected. Repeat in 4 to 6 months.
&080.0006	1.60-3.20 (80% WP)	Use limited to TX. Directed spray. Apply in the spring. Well established weeds should be eliminated by cultivation prior to treatment.

EPA Index to Pesticide Chemicals

DIURON

Site, Dosage
and Formulation
(lb a.i./A)

Tolerance, Use, Limitations

Grapefruit (continued)

&080.0006	3.20-4.80 (80% WP)	Use limited to TX. Directed spray. Seedling johnsongrass control. Apply in the spring. Well established weeds should be eliminated by cultivation prior to treatment.
F &027.0006	0.54-1.35 (27% WP)	Directed spray. Broadcast or band. Annual weed control. Apply anytime moisture is available to activate the chemical, preferably just before or after weeds germinate. Formulated with bromacil.
F &040.0006	0.80-2.40 (40% WP)	Use limited to FL, LA and TX. Directed spray. Broadcast or band. Apply anytime moisture is available to activate the chemical, preferably just before or after weeds germinate. Use the higher dosage to control perennials. Use only in groves established for 3 years or more. Formulated with bromacil.
F &040.0006	0.80-1.20 (40% WP)	Use limited to FL, LA and TX. Directed spray. Broadcast or band. Split application. Apply anytime moisture is available to activate the chemical, preferably just before or after weeds germinate. Repeat when necessary to maintain weed control. Use the higher dosage to control perennials. Use only on trees established for 3 years or more. Formulated with bromacil.
F &040.0006	1.60-2.40 (40% WP)	Use limited to AZ and CA. Directed spray. Broadcast or band. Use as an initial weed control treatment, or where a moderate to heavy weed infestation exists. Apply anytime moisture is available to activate the chemical, preferably in late fall or early winter before winter annuals become established. Use the higher dosage to control groundsel, puncturevine, bermudagrass and yellow nutsedge. Use only in groves established for 3 years or more. Formulated with bromacil.

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DIURON

Site, Dosage
and Formulation
(lb a.i./A)

Tolerance, Use, Limitations

Grapefruit (continued)

F 8040.0006	1.20-2.00 (40% WP)	Use limited to AZ and CA. Directed spray. Broadcast or band. Use for subsequent annual retreatment or where weed problem is not severe. Apply anytime moisture is available to activate the chemical, preferably in late fall or early winter before winter annuals become established. Use the higher dosage to control groundsel and yellow nutsedge. Use only in groves established for 3 years or more. Formulated with bromacil.
F 8027.0006	1.08-2.16 (27% WP)	Directed spray. Broadcast or band. Perennial weed control. Apply from winter to early summer, preferably just before or after weeds germinate. Cultivation prior to application may improve control, but avoid working the soil if weed control remains effective. Subsequent annual treatments should be used for continued control of perennials. Formulated with bromacil.
OR		
F 8027.0006	0.81-1.08 (27% WP)	Directed spray. Broadcast or band. Perennial weed control. Split application. Apply in the spring and repeat in the summer. Cultivation prior to application may improve control, but avoid working the soil if weed control remains effective. Subsequent annual treatments should be used for continued control of perennials. Formulated with bromacil.
F 8027.0006	1.62 (27% WP)	Use limited to FL. Directed spray. Broadcast or band. Seedling vine control. Apply in the spring after vines begin growth, but before vines reach the trees. Established vines should be removed prior to treatment. Apply with a surfactant. Band treatments should extend at least 1 foot beyond the dripline of the trees. Treatment may be repeated in the late summer and early fall, and subsequent annual applications should be used to control established vines. Formulated with bromacil.

EPA Index to Pesticide Chemicals

DIURON

	<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
/0200200	<u>Grapefruit</u> (non-bearing)	N.F. Do not graze treated areas. <u>General Information:</u> Use only in groves established for at least 1 year. Application may be made at any time of the year when sprinkler or flood irrigation can be used to activate the herbicide. Do not apply to home plantings. Do not apply under trees that have been subjected to freezing within 6 months.
	--	AZ state label Registration Number 010163-06393 TX state labels Registration Number 006735-04812 Registration Number 006735-04813
\$0200216 &080.0006	3.20-6.40 (80% WP)	Use limited to FL (except Martin, Palm Beach, Broward, and Dade counties). Directed spray. Apply when winter banks are pulled down.
		OR
&080.0006	2.40-3.20 (80% WP)	Use limited to FL (except Martin, Palm Beach, Broward, and Dade counties). Directed spray. Apply when winter banks are pulled down. Repeat in 4 to 6 months.
/2203000 I9001500	<u>Kentucky Bluegrass</u> (seed crop)	N.F. (seed) 2 ppm (grass and hay) <u>General Information:</u> May be applied by air.
\$2203005 &080.0006	2.00-2.40 (80% WP)	Use limited to OR. Preemergence. Broadcast. Apply soon after planting, before rainfall or irrigation, in the fall or spring, preferably early fall. Apply activated charcoal at a broadcast rate of 300 pounds per acre sprayed in a 1 inch band directly over seed rows during planting.
\$2203004 &080.0006	1.60 (80% WP)	Use limited to western OR. Postemergence. Broadcast. Apply to spring planted fields in the fall after October 15. Use only on vigorous stands planted before April 1.

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DIURON

Site, Dosage
and Formulation
(lb a.i./A)

Tolerance, Use, Limitations

Kentucky Bluegrass (seed crop) (continued)

&080.0006	1.60-3.20 (80% WP)	Use limited to western OR. Postemergence. Broadcast. Apply to plantings established for at least 1 year, from October 1 to November 15, soon after fall rains begin. In fields where straw is burned, spread unburned material before application and use the medium to high dosage range. Use the highest dosage to control perennial velvetgrass. Established weeds should be removed prior to treatment.
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/0200400	<u>Lemon</u>	1 ppm Do not graze treated areas. <u>General Information:</u> Use only in groves established for at least 1 year. Application may be made at any time of the year when sprinkler or flood irrigation can be used to activate the herbicide. Do not apply to home plantings. Do not apply under trees that have been subjected to freezing within 6 months.
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F	--	AZ state label Registration Number 010163-06393 TX state label Registration Number 006735-04814 Formulated with bromacil.
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\$0200402 &080.0006	2.40-3.20 (80% WP)	Use limited to AZ (except Yuma area) and CA (except Imperial and Coachella Valleys). Directed spray. Apply in late fall or early winter shortly after grove has been laid up in final form. Subsequent annual applications of 1.60 to 2.40 pounds per acre will usually give adequate control.
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OR

&080.0006	1.60 (80% WP)	Use limited to AZ (except Yuma area) and CA (except Imperial and Coachella Valleys). Directed spray. Apply in October or November and repeat in March or April. Subsequent annual applications of 1.60 to 2.40 pounds per acre will usually give adequate control.
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EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)		<u>Tolerance, Use, Limitations</u>
<u>Lemon (continued)</u>		
F 8027.0006	0.54-1.35 (27% WP)	Directed spray. Broadcast or band. Annual weed control. Apply anytime moisture is available to activate the chemical, preferably just before or after weeds germinate. Formulated with bromacil.
F 8040.0006	0.80-2.40 (40% WP)	Use limited to FL, LA and TX. Directed spray. Broadcast or band. Apply anytime moisture is available to activate the chemical, preferably just before or after weeds germinate. Use the higher dosage to control perennials. Use only in groves established for 3 years or more. Formulated with bromacil.
F 8040.0006	0.80-1.20 (40% WP)	Use limited to FL, LA and TX. Directed spray. Broadcast or band. Split application. Apply anytime moisture is available to activate the chemical, preferably just before or after weeds germinate. Repeat when necessary to maintain weed control. Use the higher dosage to control perennials. Use only in groves established for 3 years or more. Formulated with bromacil.
F 8040.0006	1.60-2.40 (40% WP)	Use limited to AZ and CA. Directed spray. Broadcast or band. Use as an initial weed control treatment or where a moderate to heavy weed infestation exists. Apply anytime moisture is available to activate the chemical, preferably in late fall or early winter before winter annuals become established. Use the higher dosage to control groundsel, puncturevine, bermudagrass and yellow nutsedge. Use only in groves established for 3 years or more. Formulated with bromacil.
F 8040.0006	1.20-2.00 (40% WP)	Use limited to AZ and CA. Directed spray. Broadcast or band. Use for subsequent annual retreatment or where weed problem is not severe. Apply anytime moisture is available to activate the chemical, preferably in late fall or early winter before winter annuals become established. Use the higher dosage to control groundsel and yellow nutsedge. Use only in groves established for 3 years or more. Formulated with bromacil.

EPA Index to Pesticide Chemicals

DIURON

Site, Dosage
and Formulation
(lb a.i./A)

Tolerance, Use, Limitations

Lemon (continued)

F 8027.0006	1.08-2.16 (27% WP)	Directed spray. Broadcast or band. Perennial weed control. Apply from winter to early summer, preferably just before or after weeds germinate. Cultivation prior to application may improve control, but avoid working the soil if weed control remains effective. Subsequent annual treatments should be used for continued control of perennials. Formulated with bromacil.
OR		
F 8027.0006	0.81-1.08 (27% WP)	Directed spray. Broadcast or band. Perennial weed control. Split application. Apply in the spring and repeat in the summer. Cultivation prior to application may improve control, but avoid working the soil if weed control remains effective. Subsequent annual treatments should be used for continued control of perennials. Formulated with bromacil.
F 8027.0006	1.62 (27% WP)	Use limited to FL. Directed spray. Broadcast or band. Seedling vine control. Apply in the spring after vines begin growth, but before vines reach the trees. Established vines should be removed prior to treatment. Apply with a surfactant. Band treatments should extend at least 1 foot beyond the dripline of the trees. Treatment may be repeated in the late summer and early fall, and subsequent annual applications should be used to control established vines. Formulated with bromacil.
/0100500	<u>Loganberry</u>	1 ppm <u>General Information:</u> Apply as a band application at the base of the crop row. Use only on plantings established for 1 year or more. Do not apply when crop roots are exposed or when berry crop is interplanted with fruit trees.
\$0100502 \$0100202		Use limited to CA. Directed spray. Refer to Blackberry for use and limitation information.

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)		<u>Tolerance, Use, Limitations</u>
/0300700	<u>Macadamia Nut</u>	0.1 ppm Do not graze treated areas. <u>General Information:</u> Use only under trees established in the orchard for at least 1 year. Do not exceed 8 pounds per acre per year.
\$0300715 &080.0006	1.60-4.80 (80% WP)	Use limited to HI. Postharvest. Directed spray. Apply immediately after harvest. Use with a surfactant if weeds have emerged. Retreat as needed.
&080.0006	4.80 (80% WP)	Postharvest. Directed spray. Apply immediately after harvest. Retreat as needed.
/2803000	<u>Oat-Legume Mixture</u>	Oats 1 ppm (grain) 2 ppm (forage, hay and straw) Peas 1 ppm 2 ppm (forage and hay) Vetch 1 ppm (seed) 2 ppm (forage and hay)
\$2803002 &080.0006	1.20-1.60 (80% WP)	Use limited to western OR and western WA. Pre-emergence. Apply as soon as possible after planting. For use in oat mixtures with peas or vetch. Do not replant treated areas to any crop within 1 year after the last application.
/2806200	<u>Oats (drill-planted)</u>	1 ppm (grain) 2 ppm (forage, hay and straw) <u>General Information:</u> Do not replant treated areas to any crop within 1 year after application.
(	(spring)	
\$2806202 &080.0006	0.80-1.20 (80% WP)	Use limited to areas in ID, eastern OR and eastern WA where average annual rainfall exceeds 16 inches. Preemergence. Broadcast. Apply after planting, when weeds are less than 3 to 4 inches in height.
\$2806201 &080.0006	0.80-1.20 (80% WP)	Use limited to areas in ID, eastern OR and eastern WA where average annual rainfall exceeds 16 inches. Postemergence. Broadcast. Apply within 6 weeks after planting, when weeds are less than 3 to 4 inches in height. Application 3 to 4 weeks after planting usually provides best results.

EPA Index to Pesticide Chemicals

DIURON

Site, Dosage
and Formulation
(lb a.i./A)

Tolerance, Use, Limitations

Oats (drill-planted) (continued)

((winter)

\$2806202 1.20-1.60 Use limited to western OR and western WA. Pre-
\$080.0006 (80% WP) emergence. Broadcast. Apply as soon as possible
after planting.

/2801400 Olive 1 ppm
Do not graze treated areas.
General Information: Use only under trees estab-
lished in the grove for at least 1 year.

\$2801402 1.60 Use limited to CA. Directed spray. Apply after
\$080.0006 (80% WP) the grove has been laid up in final form in late
October or November. Repeat in March or April.
Remove weed growth prior to application.

/0200600 Orange 1 ppm
Do not graze treated areas.
General Information: Use only in groves estab-
lished for at least 1 year. Application may be
made at any time of the year when sprinkler or
flood irrigation can be used to activate the
herbicide. Do not apply to home plantings. Do
not apply under trees that have been subjected to
freezing within 6 months.

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AZ state label

Registration Number 010163-06393

TX state labels

Registration Number 006735-04812

Registration Number 006735-04813

Registration Number 006735-04814

Formulated with bromacil.

F

\$0200602 Directed spray. Refer to Grapefruit for use and
\$0200202 limitation information.

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
/0200600	<u>Orange (non-bearing)</u> N.F. Do not graze treated areas. <u>General Information:</u> Use only in groves established for at least 1 year. Application may be made at any time of the year when sprinkler or flood irrigation can be used to activate the herbicide. Do not apply to home plantings. Do not apply under trees that have been subjected to freezing within 6 months.
--	AZ state label Registration Number 010163-06393 TX state labels Registration Number 006735-04812 Registration Number 006735-04813
\$0200616 S0200216	Use limited to FL (except Martin, Palm Beach, Broward, and Dade counties). Directed spray. Refer to Grapefruit (non-bearing) for use and limitation information.
/2202800 I9001500	<u>Orchardgrass (seed crop)</u> N.F. (seed) 2 ppm (grass and hay) <u>General Information:</u> May be applied by air.
\$2202805 S2203005	Use limited to OR. Preemergence. Refer to Kentucky Bluegrass (seed crop) for use and limitation information.
\$2202804 S2203004	Use limited to western OR. Postemergence. Refer to Kentucky Bluegrass (seed crop) for use and limitation information.
/0601000	<u>Papaya</u> 0.05 ppm Do not graze treated areas. <u>General Information:</u> Use only under trees established in the orchard for at least 1 year.
\$0601002 &080.0006	2.00-4.00 (80% WP) Directed spray. Apply with a surfactant if weeds have emerged.
/0500400	<u>Peach</u> 0.1 ppm Three month preharvest interval. Eight month preharvest interval in the Far West. Do not graze treated areas.
\$0500402 &080.0006	1.60-4.00 (80% WP) Directed spray. Apply in early spring. Use only under trees established in the orchard for at least 3 years.

EPA Index to Pesticide Chemicals

DIURON

Site, Dosage
and Formulation
(lb a.i./A)

Tolerance, Use, Limitations

Peach (continued)

19900300
&080.0006

0.80-1.60
(80% WP)

Directed spray. Broadcast or band. Tank mix with terbacil. Apply in the spring or in the fall after harvest. Use only under trees established in the orchard for at least 2 years. Apply as a band treatment only where crop is grown under furrow irrigation or under raised berm flood irrigation. Do not treat trees planted in the bottom of irrigation furrows or trees grown under flat flood or basin irrigation.

F
&040.0006

0.80-1.60
(40% WP)

Directed spray. Broadcast or band. Apply in the spring or in the fall after harvest. Use only under trees established in the orchard for at least 2 years. Apply as a band treatment only where crop is grown under furrow irrigation or under raised berm flood irrigation. Do not treat trees planted in the bottom of irrigation furrows or trees grown under flat flood or basin irrigation.

Formulated with terbacil.

/0400300

Pear

1 ppm

Do not graze treated areas.

General Information: Do not use on varieties grafted on full dwarf root stocks. Use only under trees established in the orchard for at least 1 year.

\$0400302
&080.0006

3.20
(80% WP)

Directed spray. Broadcast or band. Apply in the spring (March through May).

&080.0006

3.20
(80% WP)

Use limited to the Far West. Directed spray. Apply in the winter (December through February).

&080.0006

1.60
(80% WP)

Use limited to the Far West. Directed spray. Split application. Apply once postharvest, then repeat in the spring.

/0300800

Pecan

0.1 ppm

Do not graze treated areas.

General Information: Use only under trees established in the grove for at least 3 years. Do not use on soils with less than 0.5 percent organic matter.

\$0300802
&080.0006

1.60-3.20
(80% WP)

Directed spray. Apply in the spring or early summer.

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)		<u>Tolerance, Use, Limitations</u>
/2801200	<u>Peppermint</u>	2 ppm (hay)
\$2801202 &080.0006	2.40 (80% WP)	Use limited to the Pacific Northwest. Preemergence. Apply just after the last cultivation in the spring. Do not apply to newly planted (less than 1 year) peppermint. Sprinkler or flood irrigation is desirable if no rainfall occurs within 2 weeks following treatment.
/2203500	<u>Perennial Ryegrass</u> (seed crop)	N.F. (seed) 2 ppm (grass and hay)
\$2203505 &080.0006 19001500	2.00-2.40 (80% WP)	Use limited to OR. Preemergence. Broadcast. Apply soon after planting, before rainfall or irrigation, in the fall or spring, preferably early fall. Apply activated charcoal at a broadcast rate of 300 pounds per acre sprayed in a 1 inch band directly over seed rows during planting. May be applied by air.
/0601300 19001500	<u>Pineapple</u>	1 ppm <u>General Information:</u> Use limited to HI. Do not apply more than 3 broadcast applications, totaling 9.6 pounds per acre, prior to differentiation. Do not apply more than 12.8 pounds per acre per plant crop. Treated areas may be planted to pineapple or sugarcane 1 year after the last application. May be applied by air.
\$0601302 &080.0006	3.20-6.40 (80% WP)	Preplant. Broadcast. Apply just before planting, prior to weed emergence.
OR		
\$0601301 &080.0006	3.20-6.40 (80% WP)	Postplant. Broadcast. Apply immediately after planting, prior to weed emergence.
&080.0006	1.60 (80% WP)	Postplant. Broadcast or band. Plant crop only. A second and third application may be made prior to differentiation, at intervals of not less than 2 months.
\$0601302 &080.0006	1.60 (80% WP)	Postplant. Band application between the row. Plant crop only. Apply as needed to the inter-spaces.
\$0601315 &080.0006	3.20 (80% WP)	Postharvest. Broadcast. Ratoon crop. Apply after harvesting plant crop.

EPA Index to Pesticide Chemicals

DIURON

	<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
/0100600	<u>Raspberry</u>	1 ppm <u>General Information:</u> Apply as a band application at the base of the crop row. Use only on plantings established for 1 year or more. Do not apply when crop roots are exposed or when berry crop is interplanted with fruit trees.
\$0100602 &080.0006	2.40 (80% WP)	Use limited to IN, MI and OH. Directed spray. Apply in the spring.
S0100202		Use limited to CA. Directed spray. Refer to Blackberry for additional use and limitation information.
/2201200	<u>Sand Bluestem (seed crop)</u>	N.F. (seed) 2 ppm (grass and hay)
\$2201205 &080.0006 I9001500	1.60-2.40 (80% WP)	Use limited to CO, KS, NM, and OK. Dormant application. Broadcast. Apply to established plantings (at least 1 year old) shortly before weeds emerge. In fields where straw is burned, spread unburned material before application and use the higher dosage. May be applied by air.
/2201800	<u>Side-Oats Grama (seed crop)</u>	N.F. (seed) 2 ppm (grass and hay)
\$2201805 S2201205		Use limited to CO, KS, NM, and OK. Dormant application. Refer to Sand Bluestem (seed crop) for use and limitation information.

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)		<u>Tolerance, Use, Limitations</u>
/2400600	<u>Sorghum (grain crop)</u>	1 ppm (grain) 2 ppm (fodder and forage)
\$2400602 &080.0006	0.20-0.40 (80% WP)	Use limited to the Southwestern States. Post-emergence. Directed spray. Broadcast or band. Apply when sorghum is 15 or more inches in height and weeds are 2 to 4 inches in height. Use the lower dosage to control broadleaf weeds 2 inches or less in height and the higher dosage for grasses and taller broadleaf weeds. If the low dosage is used, treatment may be repeated, provided the total amount applied in 1 crop year does not exceed the high dosage. Apply with a surfactant. Do not replant treated areas to crops other than cotton or corn within 4 months following band treatment and 6 months following broadcast treatment.
/2500300 I9001500	<u>Sugarcane</u>	1 ppm <u>General Information:</u> Do not use on thinly covered subsoils or rocky areas. New varieties of sugarcane should be tested for diuron tolerance before field use. In 1 crop cycle, do not exceed a total of 4.8 pounds per acre in FL, 9.6 pounds in HI, and 8 pounds in PR. May be applied by air where appropriate.
\$2500302 &080.0006	1.60-3.20 (80% WP)	Use limited to FL. Preemergence. Broadcast or band. Apply after planting, prior to weed emergence. Use only on soils high in organic matter.
&080.0006	3.20-6.40 (80% WP)	Use limited to HI and PR. Preemergence. Broadcast. Apply after planting, prior to weed emergence.
&080.0006	2.40-3.00 (80% WP)	Use limited to LA. Preemergence. Band application. Use on cane planted on fallow land. Apply a 2 foot band over the crop row prior to weed emergence. Treatment may be made in the fall (August through October), or if barring-off is practiced, treat in the spring (January through April).
&080.0006	1.60 (80% WP)	Use limited to FL. Postemergence. Directed spray. Treatment may be repeated.

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
<u>Sugarcane (continued)</u>	
6080.0006 0.40-0.80 (80% WP)	Use limited to FL. Postemergence. Directed spray. Panicum control. Apply before panicum is 2 inches in height. Apply with a surfactant. Treatment may be repeated twice.
\$2500301 1.60-3.20 6080.0006 (80% WP)	Use limited to HI and PR. Postemergence. Broadcast. Use subsequent to preemergence or post-harvest treatment. Application may be repeated if desired. Treated fields may be replanted to sugarcane or pineapple 1 year after final application. Temporary chlorosis of crop may result from application over emerged cane. Limit the number of diuron treatments to 3 per crop cycle.
\$2500302 1.60-3.20 6080.0006 (80% WP)	Use limited to HI and PR. Postemergence. Directed spray. Use subsequent to preemergence or postharvest treatment. To control emerged weeds, apply with a surfactant. Application may be repeated if desired. Treated fields may be replanted to sugarcane or pineapple 1 year after final application. Limit the number of diuron treatments to 3 per crop cycle.
\$2500315 1.60-3.20 6080.0006 (80% WP)	Use limited to FL. Postharvest. Broadcast or band. Apply prior to the emergence of the ratoon crop and before weed emergence. Use only on soils high in organic matter.
6080.0006 3.20-6.40 (80% WP)	Use limited to HI and PR. Postharvest. Broadcast. Apply prior to the emergence of the ratoon crop and before weed emergence.
/2201400 <u>Switchgrass (seed crop)</u>	N.F. (seed) 2 ppm (grass and hay)
\$2201405 S2201205	Use limited to CO, KS, NM, and OK. Dormant application. Refer to Sand Bluestem (seed crop) for use and limitation information.
/2204300 <u>Tall Fescue (seed crop)</u>	N.F. (seed) 2 ppm (grass and hay)
\$2204305 S2203505	Use limited to OR. Preemergence. Refer to Perennial Ryegrass (seed crop) for use and limitation information.

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
/0200700 <u>Tangelo</u>	1 ppm Do not graze treated areas. <u>General Information:</u> Use only in groves established for at least 1 year. Application may be made at anytime of the year when sprinkler or flood irrigation can be used to activate the herbicide. Do not apply to home plantings. Do not apply under trees that have been subjected to freezing within 6 months.
\$0200702 3.20-6.40 8080.0006 (80% WP)	Use limited to FL (except Martin, Palm Beach, Broward, and Dade counties). Directed spray. Apply when seasonal rains are expected.
OR	
8080.0006 2.40-3.20 (80% WP)	Use limited to FL (except Martin, Palm Beach, Broward, and Dade counties). Directed spray. Apply when seasonal rains are expected. Repeat in 4 to 6 months.
/0200700 <u>Tangelo (non- bearing)</u>	N.F. Do not graze treated areas. <u>General Information:</u> Use only in groves established for at least 1 year. Application may be made at anytime of the year when sprinkler or flood irrigation can be used to activate the herbicide. Do not apply to home plantings. Do not apply under trees that have been subjected to freezing within 6 months.
\$0200716 S0200216	Use limited to FL (except Martin, Palm Beach, Broward, and Dade counties). Directed spray. Refer to Grapefruit (non-bearing) for use and limitation information.

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
/0200800 <u>Tangerine</u>	1 ppm Do not graze treated areas. <u>General Information:</u> Use only in groves established for at least 1 year. Application may be made at anytime of the year when sprinkler or flood irrigation can be used to activate the herbicide. Do not apply to home plantings. Do not apply under trees that have been subjected to freezing within 6 months.
\$0200802 \$0200702	Use limited to FL (except Martin, Palm Beach, Broward, and Dade counties). Directed spray. Refer to Tangelo for use and limitation information.
/0200800 <u>Tangerine (non-bearing)</u>	N.F. Do not graze treated areas. <u>General Information:</u> Use only in groves established for at least 1 year. Application may be made at anytime of the year when sprinkler or flood irrigation can be used to activate the herbicide. Do not apply to home plantings. Do not apply under trees that have been subjected to freezing within 6 months.
\$0200816 \$0200216	Use limited to FL (except Martin, Palm Beach, Broward, and Dade counties). Directed spray. Refer to Grapefruit (non-bearing) for use and limitation information.
/0300900 <u>Walnut (English)</u>	0.1 ppm Do not graze treated areas. <u>General Information:</u> Use limited to CA. Use only under trees established for at least 1 year.
\$0300902 2.40-4.00 \$080.0006 (80% WP)	Directed spray. Initial application. Apply in late fall or early winter, after the orchard has been laid up in final form.
\$080.0006 1.60-2.40 (80% WP)	Directed spray. Annual retreatment.
\$080.0006 1.60 (80% WP)	Directed spray. Split application. Apply in October or November. Repeat in March or April.

AND

OR

EPA Index to Pesticide Chemicals

DIURON

	<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
/2806500 I9001500	<u>Wheat (winter, drill-planted)</u>	1 ppm (grain) 2 ppm (hay, forage and straw) <u>General Information:</u> Crop injury may result from use of diuron followed by severe winter stress, disease or insect damage. Winter sensitive varieties may be less tolerant of diuron than winter hardy varieties. Do not use the chemical in the spring if these problems exist. Do not use on sandy or gravelly soils low in organic matter or on thinly covered or exposed subsoils. Do not use on wheat exposed to soil heaving or on weak plants which had difficulty emerging. Wheat should be planted at least 1 inch deep. Do not apply diuron with surfactants or with nitrogen solutions. Do not apply after the boot stage. Do not replant treated areas to any other crop within 1 year. In ID, OR and WA, east of the Cascade Range, if fall wheat fails, fields may be replanted if treatment was made before November 1. Plant after April 1 following deep disking and plowing to 4 to 6 inches deep, and do not retreat with diuron in that crop season. May be applied by air.
\$2806502 &080.0006	1.20-1.60 (80% WP)	Use limited to OR and WA, west of the Cascade Range. Preemergence. Broadcast. Apply as soon as possible after planting.
\$2806501 &080.0006	0.80-1.20 (80% WP)	Use limited to areas in ID, OR and WA, east of the Cascade Range receiving 10 to 16 inches of annual rainfall. Postemergence. Broadcast. Apply in the fall, before the soil freezes and before weeds are 2 inches in height.
&080.0006	0.80-1.20 (80% WP)	Use limited to areas in ID, OR and WA, east of the Cascade Range receiving more than 16 inches of annual rainfall. Postemergence. Broadcast. Apply 3 to 6 weeks after planting when weeds are less than 3 to 4 inches in height. Wheat should be planted before September 10. Do not apply after the ground freezes.
&080.0006	0.80-1.20 (80% WP)	Use limited to areas in ID, OR and WA, east of the Cascade Range receiving more than 16 inches of annual rainfall. Postemergence. Broadcast. Use for wheat planted in late October. Apply in the spring after wheat has begun growth, and when weeds are less than 4 inches in height.

EPA Index to Pesticide Chemicals

DIURON

Site, Dosage
and Formulation
(lb a.i./A)

Tolerance, Use, Limitations

Wheat (winter, drill-planted) (continued)

6080.0006	1.20-1.60 (80% WP)	Use limited to OR and WA, west of the Cascade Range. Postemergence. Broadcast. Apply as soon as possible after wheat emergence, before weeds are 3 to 4 inches in height.
19900300 6080.0006	0.40-0.80 (80% WP)	Use limited to areas in ID, OR and WA, east of the Cascade Range receiving more than 16 inches of annual rainfall. Postemergence. Broadcast. Tank mix with bromoxynil. Apply in the fall before ground freezes or in the spring after ground thaws. Weeds should be less than 2 inches in height or width.
19900300 6080.0006	0.40-0.80 (80% WP)	Use limited to OR and WA, west of the Cascade Range. Postemergence. Broadcast. Tank mix with bromoxynil. Apply in the fall before ground freezes or in the spring after ground thaws. Weeds should be less than 2 inches in height or width.
6080.0006	0.80-1.60 (80% WP)	Use limited to the Central Plains and Midwest. Postemergence. Broadcast. Apply in the spring before weeds are 2 inches in height.
6080.0006	1.20-1.60 (80% WP)	Use limited to KA, OK and TX. Postemergence. Broadcast. Apply in the spring before weeds are 2 inches in height.
6080.0006	0.80-1.20 (80% WP)	Use limited to the Northeast. Postemergence. Broadcast. Apply in the spring before weeds are 2 inches in height.

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)		<u>Tolerance, Use, Limitations</u>
=	<u>AGRICULTURAL PREMISES</u>	
/6600000	<u>Uncultivated Agri- cultural Areas</u>	N.F. <u>General Information:</u> Uncultivated agricultural areas include farm sites, around farm buildings, fencerows, granaries and elevators.
\$6600001	6.32-12.63	Broadcast. Apply in the spring before weeds emerge or when weeds are small. If dense vegetation is present, the tops should be removed prior to application. Deep-rooted perennial weeds may be treated at fall maturity or during the dormant season. Use the lower dosages for annual weed control or repeat applications. Use the higher dosages for perennial weed control or where long term vegetation control is desired. Apply the wettable powder and flowable concentrate formulations in sufficient water for good coverage and spray to run-off. May be formulated with bromacil; monosodium methanearsonate; sodium metaborate and sodium chlorate; or bromacil and sodium trichloroacetate.
&001.4504 F	(1.45% G)	
&002.4004	5.23-20.90 (2.4% G)	
&002.5004	1.00-15.00 (2.5% G)	
&005.0004	5.00-20.00 (5% G)	
&027.0006	0.54-8.10 (27% WP)	
&040.0006	1.60-16.00 (40% WP)	
&104.0014	4.00-32.00 (4 lb/gal F1C)	
&020.0004 &080.0006	4.00-64.00 (20% G) (80% WP)	
&100.6014	0.75 lb/100 gal (0.6 lb/gal F1C)	
=	<u>ORNAMENTALS</u>	
/3307500 I9001500	<u>Alta Fescue (seed crop)</u>	N.F. <u>General Information:</u> May be applied by air.
\$3307504 S2204404		Use limited to western OR. Postemergence. Refer to AGRICULTURAL CROPS, Alta Fescue (seed crop) for use and limitation information.

EPA Index to Pesticide Chemicals

DIURON

	<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
/3501900	<u>American Elm</u>	N.F.
\$3501902 &080.0006	2.00-4.00 (80% WP)	Use limited to CO, MT, ND, NE, SD and WY. Directed spray. Apply as a 4 foot wide band centered on the tree row. Apply in early spring before weeds begin growth and before trees leaf out. Apply only to plantings established 1 year or more and do not treat trees growing in low areas.
/3102500	<u>Asparagus Fern</u>	N.F.
\$3102501 &080.0006	2.40 (80% WP)	Use limited to FL. Postemergence. Broadcast. Hand weed and mow fern; then make application within 3 to 5 days. Do not cultivate or disturb soil after application. Apply to plantings established for 1 year or more. Do not use where organic matter is less than 1 percent.
/3302500 I9001500	<u>Bentgrass (seed crop)</u>	N.F. <u>General Information:</u> May be applied by air.
\$3302505 &080.0006	2.00-2.40 (80% WP)	Use limited to OR. Preemergence. Broadcast. Apply soon after planting, before rainfall or irrigation, in the fall or spring, preferably early fall. Apply activated charcoal at a broadcast rate of 300 pounds per acre sprayed in a 1 inch band directly over seed rows during planting.
(	(Astoria and Highland)	
\$3302504 &080.0006	1.60-3.20 (80% WP)	Use limited to OR. Postemergence. Broadcast. Apply to plantings established for at least 1 year from October 1 to November 15, soon after fall rains begin. In fields where straw is burned, spread unburned material before application and use the medium to high dosage range. Use the highest dosage to control perennial velvetgrass. Established weeds should be removed prior to treatment.

EPA Index to Pesticide Chemicals

DIURON

	<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
/3104400	<u>Bulbous Iris</u>	N.F.
\$3104402 &080.0006	3.20 (80% WP)	Use limited to western WA. Preemergence. Broad- cast. Apply after planting but no later than 4 weeks prior to emergence, usually in late Septem- ber or October. Do not replant treated areas to any crop within 1 year of last application.
/3403700	<u>Caragana</u>	N.F.
\$3403702 S3501902		Use limited to CO, MT, ND, NE, SD and WY. Directed spray. Refer to American Elm for use and limitation information.
/3302400	<u>Chewing's Fescue</u> <u>(seed crop)</u>	N.F.
\$3302405 S2203505		Use limited to OR. Preemergence. Refer to AGRI- CULTURAL CROPS, Perennial Ryegrass (seed crop) for use and limitation information.
/3513300	<u>Cottonwood</u>	N.F.
\$3513302 S3501902		Use limited to CO, MT, ND, NE, SD and WY. Directed spray. Refer to American Elm for use and limitation information.
/3504400	<u>Douglas-Fir</u>	N.F.
\$3504402 S3501902		Use limited to CO, MT, ND, NE, SD and WY. Directed spray. Refer to American Elm for use and limitation information.
/3506500	<u>Green Ash</u>	N.F.
\$3506502 S3501902		Use limited to CO, MT, ND, NE, SD and WY. Directed spray. Refer to American Elm for use and limitation information.
/3407200	<u>Honeysuckle</u>	N.F.
\$3407202 S3501902		Use limited to CO, MT, ND, NE, SD and WY. Directed spray. Refer to American Elm for use and limitation information.

EPA Index to Pesticide Chemicals

DIURON

	<u>Site, Dosage and Formulation</u> (lb a.i./A)	<u>Tolerance, Use, Limitations</u>
/3303400 I9001500	<u>Kentucky Bluegrass</u> <u>(seed crop)</u>	N.F. <u>General Information:</u> May be applied by air.
\$3303405 S2203005		Use limited to OR. Preemergence. Refer to AGRI- CULTURAL CROPS, Kentucky Bluegrass (seed crop) for use and limitation information.
\$3303404 S2203004		Use limited to OR. Postemergence. Refer to AGRI- CULTURAL CROPS, Kentucky Bluegrass (seed crop) for use and limitation information.
/3114200	<u>Narcissus</u>	N.F.
\$3114202 S3104402		Use limited to western WA. Preemergence. Refer to Bulbous Iris for use and limitation informa- tion.
/3304000 I9001500	<u>Orchardgrass (seed</u> <u>crop)</u>	N.F. <u>General Information:</u> May be applied by air.
\$3304005 S2203005		Use limited to OR. Preemergence. Refer to AGRI- CULTURAL CROPS, Kentucky Bluegrass (seed crop) for use and limitation information.
\$3304004 S2203004		Use limited to OR. Postemergence. Refer to AGRICULTURAL CROPS, Kentucky Bluegrass (seed crop) for use and limitation information.
/3304300	<u>Perennial Ryegrass</u> <u>(seed crop)</u>	N.F.
\$3304305 S2203505		Use limited to OR. Preemergence. Refer to AGRI- CULTURAL CROPS, Perennial Ryegrass (seed crop) for use and limitation information.
/3510000	<u>Ponderosa Pine</u>	N.F.
\$3510002 S3501902		Use limited to CO, MT, ND, NE, SD and WY. Directed spray. Refer to American Elm for use and limitation information.
/3510400	<u>Redcedar</u>	N.F.
\$3510402 S3501902		Use limited to CO, MT, ND, NE, SD and WY. Directed spray. Refer to American Elm for use and limitation information.

EPA Index to Pesticide Chemicals

DIURON

	<u>Site, Dosage and Formulation (lb a.i./A)</u>	<u>Tolerance, Use, Limitations</u>
/3510900	<u>Russian Olive</u>	N.F.
\$3510902		Use limited to CO, MT, ND, NE, SD and WY.
S3501902		Directed spray. Refer to American Elm for use and limitation information.
/3511500	<u>Siberian Elm</u>	N.F.
\$3511502		Use limited to CO, MT, ND, NE, SD and WY.
S3501902		Directed spray. Refer to American Elm for use and limitation information.
/3305100	<u>Tall Fescue (seed crop)</u>	N.F.
\$3305105		Use limited to OR. Preemergence. Refer to AGRICULTURAL CROPS, Perennial Ryegrass (seed crop) for use and limitation information.
S2203505		
/3120500	<u>Tulips</u>	N.F.
\$3120502	2.40-3.20	Use limited to western WA. Preemergence. Broad-
&080.0006	(80% WP)	cast. Apply after planting but no later than 4 weeks prior to emergence, usually in late September or October. Use the lower dosage on light soils, otherwise use the higher dosage. Do not replant treated areas to any crop within 1 year of last application.
=	<u>RIGHTS-OF-WAY</u>	
/6701300	<u>Rights-of-Way</u>	N.F.
		<u>General Information:</u> Rights-of-way include railroads, trestles, utilities, pipelines, powerlines, power substations, telephone lines, highways, bridges, signposts and shoulders.
\$6701301	2.72-21.78	Broadcast. Apply in the spring before weeds
&001.2504	(1.25% G)	emerge or when weeds are small. If dense vegetation is present, the tops should be removed prior to application. Deep-rooted perennial weeds may be treated at fall maturity or during the dormant season. Use the lower dosages for annual weed control or repeat applications. Use the higher dosages for perennial weed control or where long term vegetation control is desired. Apply the
F	6.32-12.63	
&001.4504	(1.45% G)	
	4.00-16.00	
&002.0004	(2% G)	
;		

Use pattern continued on the next page.

EPA Index to Pesticide Chemicals

DIURON

Site, Dosage
and Formulation
(lb a.i./A)

Tolerance, Use, Limitations

Rights-of-Way (continued)

	or	
;	5.23-20.90	wettable powder and flowable concentrate formula-
&002.4004	(2.4% G)	tions in sufficient water for good coverage and
		spray to run-off.
	1.00-15.00	May be formulated with bromacil; monosodium
&002.5004	(2.5% G)	methanearsonate; sodium metaborate and sodium
		chlorate; or bromacil and sodium trichloroacetate.
	6.00	
&003.0004	(3% G)	
	1.60-34.85	
&004.0004	(4% G)	
	5.00-20.00	
&005.0004	(5% G)	
	12.00	
&006.0004	(6% G)	
	2.72-16.34	
&001.2506	(1.25% WP)	
	0.54-8.10	
&027.0006	(27% WP)	
	1.60-16.00	
&040.0006	(40% WP)	
	5.06-40.45	
&063.2006	(63.2% WP)	
	4.00-32.00	
&104.0014	(4 lb/gal F1C)	
	8.00-64.00	
&008.0004	(8% G)	
&020.0005	(20% P/T)	
	4.00-64.00	
&020.0004	(20% G)	
&080.0006	(80% WP)	
	0.75 lb/100 gal	
&100.6014	(0.6 lb/gal F1C)	

EPA Index to Pesticide Chemicals

DIURON

Site, Dosage
and Formulation
(lb a.i./A)

Tolerance, Use, Limitations

= COMMERCIAL AND INDUSTRIAL PREMISES

/6700000	<u>Noncrop Areas</u>	N.F. General Information: Noncrop areas include industrial sites, petroleum tank farms, lumberyards, storage areas, fencerows, warehouses, parking areas and airfields.
\$6700001		Broadcast. Refer to RIGHTS-OF-WAY, Rights-of-Way
\$6701301		for use and limitation information.

= DOMESTIC DWELLINGS, MEDICAL FACILITIES AND SCHOOLS

/6700000	<u>Noncrop Areas</u>	N.F. General Information: Noncrop areas include sidewalks, driveways, patios, tennis courts, game areas, playgrounds and outdoor theaters.
\$6700001	2.72-21.78	Broadcast. Apply when soil is moist or vegetation
&001.2504	(1.25% G)	is wet. Use the lower dosages when weeds are
F		first emerging or for control of annual weeds.
	5.22-20.90	Use the higher dosage for perennial weed control.
&002.4004	(2.4% G)	Deep-rooted perennial weeds may be treated at fall
		maturity or during the dormant season.
	2.72-16.34	Formulated with sodium metaborate and sodium
&001.2506	(1.25% WP)	chlorate.

= AQUATIC AREAS

: (Impounded Water)

/6503400	<u>Lakes and Ponds</u>	N.F.
	--	FL state label
		Registration Number 037823-08436
		MI state label
		Registration Number 037823-08435

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)		<u>Tolerance, Use, Limitations</u>
:	(Adjacent to Water)	
/6501300	<u>Drainage Ditch Banks</u>	N.F.
\$6501362	6.32-12.63	Broadcast. Apply in the spring before weeds emerge or when weeds are small. If dense vegetation is present, the tops should be removed prior to application. Where a dosage range is given, use the lower dosage for annual weed control and the higher dosage for perennial weed control. May be formulated with bromacil; monosodium methanearsonate; sodium metaborate and sodium chlorate; or bromacil and sodium trichloroacetate.
&001.4504 F	(1.45% G)	
&002.4004	5.22-20.90 (2.4% G)	
&002.5004	5.00 (2.5% G)	
&003.0004	6.00 (3% G)	
&004.0004	8.00 (4% G)	
&006.0004	12.00 (6% G)	
&008.0004	16.00 (8% G)	
&020.0004	40.00 (20% G)	
&100.6014	0.75 lb/100 gal (0.6 lb/gal FlC)	

EPA Index to Pesticide Chemicals

DIURON

<u>Site, Dosage and Formulation</u> (lb a.i./A)		<u>Tolerance, Use, Limitations</u>
/6502200	<u>Drainage Ditches</u> (dry)	N.F.
	--	AZ state label Registration Number 010163-06393 FL state labels Registration Number 006720-06227 Registration Number 002342-06975
\$6502262 &080.0006	4.00-80.00 (80% WP)	Broadcast. Apply when seasonal rainfall is expected, preferably when soil is moist. Ditch must be empty. There should be at least 4 inches of rainfall to fix the chemical in the soil; if not, fill ditch with water and allow to stand 72 hours. Drain and discard the water before using the ditch. Use 4.00 to 16.00 pounds per acre for annual weed control.
&104.0014	32.00 (4 lb/gal F1C)	
&008.0004 &020.0004 &020.0005	32.00-80.00 (8% G) (20% G) (20% P/T)	
/6502100	<u>Irrigation Ditches</u>	N.F.
	--	AZ state label Registration Number 010163-06393 FL state label Registration Number 006720-06227 Registration Number 002342-06975
\$6502162 &080.0006	4.00-80.00 (80% WP)	Broadcast. Apply during noncrop season when rainfall is expected, preferably when soil is moist. Ditch must be empty. There should be at least 4 inches of rainfall to fix the chemical in the soil; if not, fill ditch with water and allow to stand 72 hours. Drain and discard the water before using the ditch. Use 4.00 to 16.00 pounds per acre for annual weed control.
&104.0014	32.00 (4 lb/gal F1C)	
&008.0004 &020.0004 &020.0005	32.00-80.00 (8% G) (20% G) (20% P/T)	

EPA Index to Pesticide Chemicals

DIURON

Site, Dosage
and Formulation
(lb a.i./A)

Tolerance, Use, Limitations

AERIAL AND TANK MIX APPLICATIONS

Aerial Application

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Refer to

AGRICULTURAL CROPS

Alfalfa, Alta Fescue (seed crop), Asparagus,
Barley (winter, drill-planted), Bentgrass (seed
crop), Cotton, Kentucky Bluegrass (seed crop),
Orchardgrass (seed crop), Perennial Ryegrass
(seed crop), Pineapple, Sand Bluestem (seed
crop), Side-Oats Grama (seed crop), Sugarcane,
Switchgrass (seed crop), Tall Fescue (seed crop),
Wheat (winter, drill-planted)

ORNAMENTALS

Alta Fescue (seed crop), Bentgrass (seed crop),
Chewing's Fescue (seed crop), Kentucky Bluegrass
(seed crop), Orchardgrass (seed crop), Perennial
Ryegrass (seed crop), Tall Fescue (seed crop)

Tank Mix

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Refer to

AGRICULTURAL CROPS

Apple, Cotton, Peach, Wheat (winter, drill-
planted)

EPA Index to Pesticide Chemicals

DIURON

Listing of Registered Pesticide Products by Formulation

&095.0001	<u>95% technical chemical</u>			
#	diuron (035505)			
	000352-00324	006170-00008	009618-00007	
&097.0001	<u>97% technical chemical</u>			
#	diuron (035505)			
	039445-00001			
&098.0001	<u>98% technical chemical</u>			
#	diuron (035505)			
	002393-00324	002749-00058	006759-00002	007173-00073
	011603-00003	013801-00014		
&080.0002	<u>80% formulation intermediate</u>			
#	diuron (035505)			
	000904-00405	002749-00082	011603-00002	012020-00002
&000.4004	<u>0.4% granular</u>			
#	diuron (035505) plus bromacil (012301)			
	006735-04814			
&000.8004	<u>0.8% granular</u>			
#	diuron (035505)			
	006735-04812			
&001.0004	<u>1% granular</u>			
#	diuron (035505)			
	006735-04813			
&001.2504	<u>1.25% granular</u>			
#	diuron (035505), sodium metaborate (011104) plus sodium chlorate (073301)			
	000557-01825	000802-00352	004581-00266	010659-00049
	020954-00038			
&001.4504	<u>1.45% granular</u>			
#	diuron (035505), bromacil (012301) plus sodium trichloroacetate (081001)			
	001022-00271			
&002.0004	<u>2% granular</u>			
#	diuron (035505) plus bromacil (012301)			
	001706-00125	034913-00003		
&002.4004	<u>2.4% granular</u>			
#	diuron (035505), sodium metaborate (011104) plus sodium chlorate (073301)			
	000359-00520			

EPA Index to Pesticide Chemicals

DIURON

Listing of Registered Pesticide Products by Formulation (continued)

&002.5004 2.5% granular
diuron (035505) plus bromacil (012301)
000179-00040 006720-00055

&003.0004 3% granular
diuron (035505) plus bromacil (012301)
000179-00036

&004.0004 4% granular
diuron (035505)
000179-00019 010311-00001

diuron (035505) plus bromacil (012301)
000179-00088 002393-00358 008823-00038 034913-00013

&005.0004 5% granular
diuron (035505) plus bromacil (012301)
009603-00001

&006.0004 6% granular
diuron (035505)
000179-00018

diuron (035505) plus bromacil (012301)
000179-00035

&008.0004 8% granular
diuron (035505)
000179-00020 002393-00295 034913-00004

diuron (035505) plus sodium metaborate (011104)
000359-00492 010659-00048

&020.0004 20% granular
diuron (035505)
000179-00041 002342-00522 002342-06975 006720-00056

&020.0005 20% pelleted/tableted
diuron (035505)
002393-00296

&001.2506 1.25% wettable powder
diuron (035505), sodium metaborate (011104) plus sodium chlorate
(073301)
004581-00266 010659-00049 020954-00038

&027.0006 27% wettable powder
diuron (035505) plus bromacil (012301)
000352-00351 002749-00143

EPA Index to Pesticide Chemicals

DIURON

Listing of Registered Pesticide Products by Formulation (continued)

&040.0006	<u>40% wettable powder</u>			
#	diuron (035505) plus bromacil (012301)			
	000352-00352			
#	diuron (035505) plus terbacil (012701)			
	000352-00374			
&063.2006	<u>63.2% wettable powder</u>			
#	diuron (035505) plus bromacil (012301)			
	009210-00005			
&080.0006	<u>80% wettable powder</u>			
#	diuron (035505)			
	000148-01149	000352-00247	002393-00321	002749-00059
	006720-06227	007001-00184	007001-00247	007173-00065
	007173-00086	007173-00141	008732-00001	009663-00009
	010163-06393	011297-00001	011603-00005	011658-00001
	019713-00021	037823-08435	037823-08436	
&100.6014	<u>0.6 lb/gal flowable concentrate</u>			
#	diuron (035505) plus monosodium acid methanearsonate (013803)			
	000148-01159	000677-00347	002749-00141	004841-00054
	005905-00135	009663-00005	009779-00084	009779-00175
&100.9014	<u>0.9 lb/gal flowable concentrate</u>			
#	diuron (035505) plus monosodium acid methanearsonate (013803)			
	006865-09320			
&101.5014	<u>1.5 lb/gal flowable concentrate</u>			
#	diuron (035505) plus monosodium acid methanearsonate (013803)			
	033560-00010			
&102.8014	<u>2.8 lb/gal flowable concentrate</u>			
#	diuron (035505)			
	000148-01158	000352-00199	002749-00359	007173-00078
	009663-00013			
&104.0014	<u>4 lb/gal flowable concentrate</u>			
#	diuron (035505)			
	019713-00036			

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II. REQUIREMENT FOR SUBMISSION OF GENERIC DATA

- A. This portion of the guidance document is a Notice issued under the authority of FIFRA Section 3(c)(2)(B) and describes, in table format, the data required for maintaining the registrability of each product. Additionally, a bibliography (Appendix III-1) is included that identifies that data considered as part of the data base supporting this standard. EPA has determined that additional generic data described in this Notice must be submitted to EPA for evaluation in order to maintain in effect the registration(s) of your product(s) identified as an attachment to the cover letter accompanying this guidance document. As required by FIFRA Section 3(c)(2)(B), you are required to take appropriate steps to comply with this Notice.

EPA may suspend the registration of each of those products unless, within the specified time, you have informed EPA how you will satisfy the requirements of this Notice. Any such suspension will remain in effect until you have complied with the terms of this Notice.

- B. What Generic Data ^{1/}Must Be Submitted. You may ascertain which generic data you must submit by consulting Table A at the end of this section. That table shows all the generic data needed to evaluate the continued registrability of all products, and the dates by which the data must be submitted. The required data must be submitted and any necessary studies must be conducted in accordance with EPA-approved protocols, the Pesticide Registration Guidelines ^{2/}, or data collected under the approved protocols of the Organization for Economic Cooperation and Development (OECD). If you wish not to develop data which are necessary to support the registration or reregistration of certain uses appearing in your labeling, you may delete those uses at the time you submit your revised labeling.

Also for certain kinds of testing (generally ecological effects), EPA requires the test substance to be a "typical formulation," and in those cases EPA needs data of that

^{1/} Generic data pertain to the properties or effects of a particular ingredient, and thus are relevant to an evaluation of the risks of all products containing that ingredient (or all such products having a certain use pattern), regardless of any such product's unique composition or use. Product-specific data relate only to the properties or effects of a product with a particular composition (or a group of products with closely similar composition).

^{2/} The Pesticide Registration Guidelines were repropoed on November 24, 1982 in 47 Federal Register 53192.

type for each major formulation category (e.g., emulsifiable concentrates, wettable powders, granulars, etc.) These are classified as generic data and when needed are specified in Table A. EPA may possess data on certain "typical formulations" but not others. Note: The "typical formulation" data should not be confused with product-specific data (Table B) which are required on each formulation. Product-specific data are further explained in Section IV of this document.

C. Options Available for Complying With Requirements to Submit Data

Within 90 days of your receipt of this Notice you must submit to EPA a completed copy of the form entitled "FIFRA Section 3(c)(2)(B) Summary Sheet" [EPA Form 8580-1, Appendix III-2] for each of your products. On that form you must state which of the following methods you will use to comply with the requirements of this Notice:

1. (a) Notify EPA that you will submit the data, and
(b) either submit the existing data you believe will satisfy the requirement, or state that you will generate the data by conducting testing. If the test procedures you will use deviate from (or are not specified in) the Registration Guidelines or protocols contained in the Reports of Expert Groups to the Chemicals Group, Organization for Economic Cooperation and Development (OECD) Chemicals Testing Programme, you must enclose the protocols you will use.
2. Notify EPA that you have entered into an agreement with one or more other registrants to jointly develop (or share in the cost of developing) the data. If you elect this option, you must notify EPA which registrant(s) are parties to the agreement.
3. File with EPA a completed "Certification of Attempt to Enter Into an Agreement With Other Registrants for Development of Data" (EPA Form 8580-6, Appendix III-3)*
4. Request that EPA amend your registration by deleting the uses for which the data are needed. (This option is not available to applicants for new products.)

*/ FIFRA Section 3(c)(2)(B) authorizes joint development of data by two or more registrants, and provides a mechanism by which parties can obtain an arbitrator's decision if they agree to jointly develop data but fail to agree on all the terms of the agreement. The statute does not compel any registrant to agree to develop data jointly.

(Footnote continued at bottom of next page)

5. Request voluntary cancellation of the registration(s) of your products for which the data are needed. (This option is not available to applicants for new products.)
- D. Procedures for Requesting Changes in Testing Methodology and Extensions of Time

EPA recognizes that you may disagree with our conclusions regarding the appropriate ways to develop the required data or how quickly the data must be submitted. If the test procedures you plan to use deviate from (or are not specified in) the registration guidelines or protocols contained in the reports of the Expert Groups to the Chemical Groups, Organization for Economic Cooperation and Development (OECD) Chemicals Testing Programme, you must submit the protocol for Agency review prior to the initiation of the test.

If you think that you will need more time to generate the required data than is allowed by EPA's schedule, you may submit a request for an extension of time. The extension request must be submitted in writing to the Product Manager. The extension request should state the reasons why you conclude that an extension is appropriate. While EPA considers your request, you must strive to meet the deadline for submitting the required data.

(Footnote continued from previous page)

In EPA's opinion, joint data development by all registrants who are subject to the requirements to submit a pertinent item of data or a cost-sharing agreement among all such registrants is clearly in the public interest. Duplication of testing could increase costs, tie up testing facilities, and subject an unnecessarily large number of animals to testing.

As noted earlier, EPA has discretion not to suspend the registration of a product when a registrant fails to submit data required under FIFRA Section 3(c)(2)(B). EPA has concluded that it is appropriate to exercise its discretion not to suspend in ways which will discourage duplicative testing. Accordingly, if (1) a registrant has informed us of his intent to develop and submit data required by this Notice; and (2) a second registrant informs EPA that it has made a bona fide offer to the first registrant to share in the expenses of the testing [on terms to be agreed upon or determined by arbitration under FIFRA Section 3(c)(2)(B)(iii)]; and (3) the first registrant has declined to agree to enter into a cost-sharing agreement, EPA will not suspend the second firm's registration. While the first firm is not required to agree to jointly develop data, EPA is not required to force the second firm to engage in economically inefficient duplicative testing in order to maintain its registration.

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	1/ Composition	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
<u>§158.120 Product Chemistry</u>				
<u>Product Identity:</u>				
61-1 - Identity of Ingredients	TGAI	Partially	00020082 00020122 00028099	Yes ² / 3 mos.
61-2 - Statement of Composition	TGAI	Partially	00017776 00020082 00028099	Yes 6 mos.
61-3 - Discussion of Formation of Ingredients	TGAI	Partially	00020122 05018952	Yes ⁴ / 12 mos.
<u>Analysis and Certification of Product Ingredients</u>				
62-1 - Preliminary Analysis	TGAI	Partially	00017793 00020082	Yes ³ / 3 mos.
62-2 - Certification of Limits	TGAI	Partially	00020122 00020082	Yes ³ / 3 mos.
62-3 - Analytical Methods for Enforcement of Limits	TGAI	Yes	GS0046-013	No
<u>Physical and Chemical Characteristics</u>				
63-2 - Color	TGAI	No	-	Yes ⁵ /
63-3 - Physical State	TGAI	Yes	00017744 00020122	No
63-4 - Odor	TGAI	Partially	00017744	Yes ⁵ /

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	1/ Composition	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
<u>Physical and Chemical Characteristics</u>				
63-5 - Melting Point	TGAI	Partially	00017744 00028099	Yes ⁵ /
63-6 - Boiling Point	TGAI	n/a ⁶ /		
63-7 - Density, Bulk Density, or Specific Gravity	TGAI	partially	00020122	Yes ⁵ /
63-8 - Solubility	TGAI OR PAI	No	-	Yes ⁵ /
63-9 - Vapor Pressure	PAI	Yes	00017744 00028099	No
63-10 - Dissociation constant	PAI	n/a		
63-11 - Octanol/water partition coefficient	PAI	No	-	Yes ⁵ /
63-12 - pH	TGAI	n/a		
63-13 - Stability	TGAI	No	-	Yes ⁵ /
<u>Other Requirements:</u>				
64-1 - Submittal of samples	Choice			

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

§158.120 Product Chemistry

- 1/ Composition: TGAI = Technical grade of the active ingredient; PAI = Pure active ingredient; Choice = Choice of several test substances determined on a case-by-case basis.
- 2/ Updated information must be supplied on identity and quantity of impurities and inerts.
- 3/ A certification of ingredient limits must be supplied.
- 4/ Information on the presence of nitrosoamines is needed.
- 5/ Data must be submitted no later than twelve months from the issue date of the guidance package.
- 6/ N/a= Not applicable: Data requirement is not necessary for purposes of this standard.

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	1/ Composition	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)		Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
§158.125 Residue Chemistry					
171-4 - Nature of Residue (Metabolism)					
- Plants	PAIRA	Yes		05012084 05018778 05016644 05019000 05016668 05019267 05017270 05019372 05017278 05019491 05017282 05019802 05017776 05020009 05018237 05020294 05018348 05020492 05018749 05021633 05018775	No
- Livestock	PAIRA and plant metabolites	Yes		00015819 05016946 00015877 05018056 00015886	No
171-4 - Residue Analytical Method					
- Plant residues				00016639 05017251 05016655 05016663 05019371 05016666 05020201 05016802 05020290 05016941 05020316 05017240 05020351	No
- Animal residues	TGAI and metabolites	Yes		00015819 00015886 00015877	No
171-4 - Storage Stability Data	PAI	No			Yes

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirements	Composition 1/	Does EPA Have Data To Satisfy This Requirement? (Yes, No, or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?2/
<u>§158.125 Residue Chemistry</u>				
171-4 - Magnitude of the Residue- Residue Studies for Each Food Use				
- Crop Group				
Alfalfa	TEP	Yes	00017927	No
Apples	TEP	Yes	00017879 00017919	No
Artichokes	TEP	Yes	00017873 00017887	No
Asparagus	TEP	Yes	00015898 00017872	No
Bananas	TEP	Yes	00028062	No
Barley ^{3/}	TEP	Yes	00017874, 00017888	No
Berries ^{4/}	TEP	Yes	00015875 00017738 00017740 00017878 00020134 00027601 00028154 00028158 00028160 00017876	No

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirements	Composition	Does EPA Have Data To Satisfy This Requirement? (Yes, No, or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)? ^{2/}
Residue Studies				
Citrus fruits	TEP	Yes	00017746 00017751 00028047	No
Cherries	TEP	No	-	Yes ^{5/}
Clover, Forage & hay	TEP	Yes	00017875 00017889	No
Corn ^{6/}	TEP	Yes	00017752 00017754 00017755 00017760 00017894 00017930 00020076 00020077 00024165 00028051 00032183 00052112	No
Cotton, Seed	TEP	Yes	00017811 00028139 00022911 05016614 00028055	No
Grapes (Currants)	TEP	Yes	00015799 00032186	No
Grass, Bermuda ^{7/}	TEP	Yes	00020114	No
Grasses (except Bermuda grass)	TEP	Yes	GS0046-006	No ^{8/}
Nuts	TEP	Yes	00017868 00017892 00028068 00030633	No
Oats ^{9/}	TEP	Yes	00017881 00017882 00017883 00017921 00017922	No
Olives	TEP	Yes	00017884 00017923	No

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	Composition	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
171-4 - Magnitude of the Residue Residue Studies				
Papayas	TEP	Yes	00017741 00017745 GS0046-001	No ^{10/}
Peaches	TEP	Yes	GS0046-002	No ^{11/}
Pears	TEP	Yes	00017880 00017920	No
Peas	TEP	Yes	00017881 00017921	No ^{12/}
Peppermint, hay	TEP	Yes	00017868	No
Pineapples	TEP	Partially	00028055	Yes ^{13/}
Potatoes	TEP	Yes	00028064	No
Rye ^{14/}	TEP	Yes	00017874 00017888	No
Sorghum ^{15/}	TEP	Yes	00017885 00017924	No
Sugarcane	TEP	Yes	00028055 00029724 GS0046-003	No ^{16/}
Trifol, Birdsfoot forage and hay	TEP	Yes	00028029	No
Vetch ^{17/}	TEP	Yes	00017881 00017921	No
Wheat	TEP	Partially	00017925 00028111 00017926 GS0046-004	Yes ^{18/}

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	1/ Composition	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?2/
171-4 - Magnitude of the Residue Residue Studies				
<u>Processed Crops</u>				
Citrus pulp	TEP	Yes	00017746	No
Pineapple bran	TEP	No	-	Yes ^{13/}
<u>Meat and Milk</u>	TGAI	Yes	00015819 00015877 00015886	No
<u>Poultry and Eggs</u>	TGAI	Yes	GS0046-005	No ^{19/}

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

\$158.126 Residue Chemistry

- 1/ Composition: TCAI = technical grade of the active ingredient; PAIRA = pure active ingredient, radiolabelled; PAI = pure active ingredient; TEP = typical end-use product.
- 2/ Data must be submitted no later than 48 months from receipt of this guidance package.
- 3/ Barley includes barley grain, barley forage, barley hay, and barley straw.
- 4/ Berries include blackberries, blueberries, boysenberries, currants, dewberries, gooseberries, huckleberries, loganberries and raspberries.
- 5/ Data on residues in cherries is needed to support a tolerance (in Utah).
- 6/ Corn includes corn grain; ears, fodder, and forage of field corn; ears, fodder, and forage of pop corn; and ears, fodder, and forage of sweet corn.
- 7/ Bermudagrass and Bermudagrass hay.
- 8/ Grasses and grass hay, except Bermudagrass and Bermudagrass hay: PP 42.
- 9/ Oats includes oat grain, oat forage, oat hay, and oat straw
- 10/ Papayas: PP 1E1164, p. 19-31.
- 11/ Peaches: PP 2E1263, Section D, p. 13-31.
- 12/ Peas include peas, peas forage, and pea hay.
- 13/ Data on residues in dried pineapple bran is required.
- 14/ Rye includes rye grain, rye forage, rye hay, and rye straw.
- 15/ Sorghum includes grain, fodder, and forage.
- 16/ Sugarcane: PP17, Section D, p. 1-14.
- 17/ Vetch includes seed, forage, and hay.
- 18/ Wheat includes wheat grain, wheat forage, wheat hay, and wheat straw. Data on residues in milling fractions of wheat is required: PP220, Section D.
- 19/ Poultry and eggs: PP356, Supplemental data with letter of March 15, 1963, T.W. Hanavan to W. Stokes, submitted by E.I. duPont de Nemours & Company.

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	Composition	1/ Use 2/ Pattern	Does EPA Have Data To Satisfy This Requirement? (yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?3/
<u>\$158.130 Environmental Fate</u>					
<u>DEGRADATION STUDIES-LAB:</u>					
161-1 - Hydrolysis	TGAI or PAIRA	A,B,C,D,E	No		Yes 3/
<u>Photodegradation</u>					
161-2 - In water	TGAI or PAIRA	A,B,C	No		Yes 3/
161-3 - In soil	TGAI or PAIRA	A	No		Yes 3/
161-4 - In Air	TGAI or PAIRA	A	n/a 4/		
<u>METABOLISM STUDIES-LAB:</u>					
162-1 - Aerobic Soil	TGAI or PAIRA	A,B,D,E	Yes	05020274 05017253	No
162-2 - Anaerobic Soil	TGAI or PAIRA	A 11/	No		Yes 3/
162-3 - Anaerobic Aquatic	TGAI or PAIRA	C	No		Yes 3,5/
162-4 - Aerobic Aquatic	TGAI or PAIRA	C	No		Yes 3/
<u>MOBILITY STUDIES:</u>					
163-1 - Leaching and Adsorption/Desorption	TGAI or PAIRA	A,B,C,D,E	Partial	00001450 00040776 00044017 05016640 05017166 05018028 05018132 05019486	Yes 3,6/

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	Composition	1/ Use 2/ Pattern	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
<u>MOBILITY STUDIES:</u>					
163-1 - Leaching				05019491 05019946 05020274 05020826 05022048	
163-2 - Volatility (Lab)	TEP	A,D	No	-	Yes ^{3/}
163-3 - Volatility (Field)	TEP	A,D	No	-	Yes ^{3/}
<u>DISSIPATION STUDIES-FIELD:</u>					
164-1 - Soil	TEP	A,B,E	No	-	Yes ^{3/}
164-2 - Aquatic	TEP	C	No	-	Yes ^{3/}
164-3 - Forestry	TEP	B,C	n/a ^{4/}		
164-4 - Combination and Tank Mixes			n/a ^{4/}		
164-5 - Soil, Long-term	TEP	All/	No	-	Yes ^{3/7/}

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	Composition	1/ Use 2/ Pattern	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
<u>ACCUMULATION STUDIES:</u>					
165-1 - Rotational Crops ^{9/} (Confined)	PAIRA	A	Partially	05020274	Yes ^{3/8/}
165-2 - Rotational Crops ^{9/} (Field)	TEP	A	No	-	Yes ^{3/}
165-3 - Irrigated Crops ^{10/}	TEP	C	No	-	Yes ^{3/}
165-4 - In Fish	TGAI or PAIRA	A,B,C	No	-	Yes ^{3/}
165-5 - In Aquatic Non-Target Organisms	TEP	C	No	-	Yes ^{3/}

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

§158.130 Environmental Fate
(continued)

- 1/ Composition: TGAI = Technical grade of the active ingredient; PAIRA = pure active ingredient, radiolabelled, TEP = Typical end-use product.
- 2/ The use patterns are coded as follows: A=Terrestrial, Food Crop; B=Terrestrial, Non-Food; C=Aquatic, Non-Food; D= Greenhouse, Non-Food; E=Domestic Outdoor.
- 3/ Data must be submitted no later than four years from the issue date of the guidance package.
- 4/ N/A= Not applicable: data requirement is not necessary for the purposes of this standard.
- 5/ This study may substitute for the anaerobic soil metabolism study, but the reverse is not true.
- 6/ Additional data are needed to assess the mobility of diuron degradation products. Data on the adsorption of DCPMU are acceptable.
- 7/ Long-term field dissipation studies will be required if the dissipation rate shown by tests per Section 162-1 or 164-1 is less than 50% prior to subsequent application.
- 8/ All specified data are needed except those for small grains planted 30-120 days after soil treatment.
- 9/ For crops rotated on treated areas any one of the following will apply:
 - a. A tolerance must be obtained for the rotated crop.
 - b. The product label must include a restriction against the rotation of crops used for food or feed on treated areas.
 - c. Data must be provided to determine time intervals at which rotated crops planted on treated areas will be free of pesticide residues.
- 10/ In instances where water from treated irrigation or drainage ditches becomes contaminated with pesticide residues, any one of the following will apply:
 - a. A tolerance must be obtained for any crop exposed to contaminated water.
 - b. The product label must include a restriction against the use of water containing pesticide residues on crops grown for food or feed.
 - c. Data must be provided to demonstrate conditions under which water exposed to treated irrigation or drainage ditches can be used on crops without resulting in illegal plant residues.
- 11/ Required for field and vegetable crop uses only.

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	Composition	1/ Use 2/ Patterns	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
<u>\$158.135 Toxicology</u>					
<u>ACUTE TESTING:</u>					
81-1 - Oral LD ₅₀ - Rat	TGAI	A,B,C,D,E	Yes	00028006	No
81-2 - Dermal LD ₅₀	TGAI	A,B,C,D,E	Yes	00017795	No
81-3 - Inhalation LC ₅₀ - Rat	TGAI	A,B,C,D,E	No	-	Yes, 14 months
81-6 - Dermal Sensitization	TGAI	A,B,C,D,E	No	-	Yes
81-7 - Acute Delayed Neurotoxicity-Hen	TGAI	A,B,C,D,E	n/a ^{3/}		
<u>SUBCHRONIC TESTING:</u>					
82-1 - 90-Day Feeding - Rodent, Non-rodent	TGAI	A,B,C,D,E	n/a		
82-2 - 21-Day Dermal	TGAI	A,B,C,D,E	n/a		
82-3 - 90-Day Dermal	TGAI	A,B,C,D,E	n/a		
82-4 - 90-Day Inhalation - Rat	TGAI	A,B,C,D,E	No	-	Deferred ^{4/}
82-5 - 90-Day Neurotoxicity- Hen/Mammal	TGAI	A,B,C,D,E	n/a		

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	Composition	1/ Use Patterns	2/ Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
<u>§158.135 Toxicology</u> (continued)					
<u>CHRONIC TESTING:</u>					
83-1 - Chronic Toxicity - 2 species: Rodent and Non-rodent	TGAI	A & B	Yes	00017763 00017764	No
83-2 - Oncogenicity Study - 2 species: Rat and Mouse preferred	TGAI	A & B	No	-	Yes ^{5/}
83-3 - Teratogenicity - 2 species	TGAI	A & B	Partially	00017763 00027598 05018751	Yes, 6 months ^{6/}
83-4 - Reproduction, 2-generation	TGAI	A & B	Yes	GS0046-012	No
<u>MUTAGENICITY TESTING</u>					
84-2 - Gene Mutation	TGAI	A & B	No	-	Yes, 26 months ^{7/}
84-2 - Chromosomal Aberration	TGAI	A & B	No	-	Yes, 26 months ^{7/}
84-2 - Other Mechanisms of Mutagenicity	TGAI	A & B	No	-	Yes, 26 months ^{7/}

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	Composition	1/ Use 2/ Pattern	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)?	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
<u>§158.135 Toxicology</u> (continued)					
<u>SPECIAL TESTING</u>					
85-1 - General Metabolism	PAI or PAIRA	A & B	Partially	00037664 05017260	Yes, 24 months ^{B/}
85-2 - Domestic Animal Safety	Choice				

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

§158.135 Toxicology

- 1/ Composition: TGA1 = Technical grade of the active ingredient; PAIRA = Pure active ingredient, radiolabelled; PAI = Pure active ingredient; TEP = Typical end use product; CHOICE = test substances determined on a case-by-case basis.
- 2/ The use patterns are coded as follows: A=Terrestrial, Food Crop; B=Terrestrial, Non-Food; C=Aquatic, Non-Food; D=Greenhouse, Non-Food; E=Domestic Outdoor.
- 3/ N/A = Not applicable: Data requirement is not necessary for the purposes of this standard.
- 4/ The decision whether testing is required cannot be made until the results of the acute inhalation toxicity testing are submitted and reviewed.
- 5/ Two oncogenicity tests are required, one in rat and one in another species.
- 6/ Two studies are required, one in rat and one in another species (rabbit).
- 7/ The following mutagenicity data are required:
 - a. A test for gene mutations in bacterial (Salmonella typhimurium) plate test to include strains TA98 and TA100 with and without activation.
 - b. A test for gene mutation in mammalian cells in culture(e.g. mouse lymphoma L5178Y cells using TK locus).
 - c. A test for DNA repair induction: in vivo mammalian sister chromatid exchange test.
 - d. A test for chromosome effects (either in vivo or in vitro mammalian chromosome aberration analysis).
- 8/ A radioactive tracer metabolism study in a nonruminant species may be required when the other toxicology data gaps are fulfilled.

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	Composition	1/ Use Pattern	Does EPA Have Data To Satisfy This Requirement? (Yes No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
<u>§158.145 Wildlife and Aquatic Organisms</u>					
<u>AVIAN AND MAMMALIAN TESTING</u>					
71-1 - Avian Oral LD ₅₀	TGAI	A, B, C, E	Yes	GS0046-010 ³ /	No
71-2 - Avian Dietary LC ₅₀	TGAI	A, B, C, E	Yes	00028757 ³ /	No
71-3 - Wild Mammal Toxicity	TGAI	A, B, C, E	n/a ⁴ /		
71-4 - Avian Reproduction	TGAI	A, B, C, E	n/a ⁴ /		
71-5 - Simulated and Actual Field Testing - Mammals and Birds	TEP	A, B, C	n/a ⁴ /		
<u>AQUATIC ORGANISM TESTING</u>					
72-1 - Freshwater Fish LC ₅₀	TGAI	A, B, C, E	Yes	00003503 ³ / GS0046-007 ³ / GS0046-008 ³ / GS0046-011 ³ /	No No
72-2 - Acute LC ₅₀ Freshwater Invertebrates	TGAI	A, B, C, E	Yes	00003503 ³ /	No
72-3 - Acute LC ₅₀ Estuarine and Marine Organisms	TGAI	A, B, C, E	No		Yes ⁵ /
72-4 - Fish Early Life Stage and Aquatic Invertebrate Life-Cycle	TGAI	A, B, C, E	Partial	GS0046-011 GS0046-009	Yes ⁶ /

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	Composition	1/ Use 2/ Pattern	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
5158.145 Wildlife and Aquatic Organisms (continued)					
72-5 - Fish - Life-Cycle	TGAI		n/a		
72-6 - Aquatic Organism Accumulation	TGAI, PAI OR Degradation Product	A, B, C	Partially	GS0046-011	Yes
72-7 - Simulated or Actual Field Testing - Aquatic Organisms	TEP		Partially	05020229	Reserved ⁷ /

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	Composition	1/ Use	2/ Pattern	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
<u>§158.155 Nontarget Insect</u>						
<u>NONTARGET INSECT TESTING -</u>						
<u>POLLINATORS:</u>						
141-1 - Honey bee acute contact LD ₅₀	TGA1	A,B		Yes	00001999	No
141-2 - Honey bee - toxicity of residues on foliage	TEP	A,B		n/a		
141-3 - Wild bees toxicity of residues on foliage	TEP	A,B		n/a		
141-4 - Honey bee subacute feeding study	(Reserved)8/					
141-5 - Field testing for pollinators	TEP	A,B		n/a		

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

Data Requirement	Composition 1/ Use 2/ Pattern	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
<u>§158.155 Nontarget Insect (continued)</u>				
<u>NONTARGET INSECT TESTING - AQUATIC INSECTS:</u>				
142-1 - Acute toxicity to aquatic insects	(Reserved) 9/			
142-2 - Aquatic insect life-cycle study	(Reserved) 9/			
142-3 - Simulated or actual field testing for aquatic insects	(Reserved) 9/			
143-1 - NONTARGET INSECT TESTING - PREDATORS AND PARASITES	(Reserved) 9/			
143-3				

TABLE A
GENERIC DATA REQUIREMENTS FOR DIURON

§158.145 Wildlife and Aquatic Organisms
(continued)

- 1/ Composition: TGA1 = Technical grade of the active ingredient; PA1 = pure active ingredient; TEP = Typical end-use product;
- 2/ The use patterns are coded as follows: A=Terrestrial, Food Crop; B=Terrestrial, Non-Food Crop; C=Aquatic, Non-Food; D=Greenhouse, Non-Food; E=Domestic Outdoor.
- 3/ Studies that totally fulfill the data requirements.
- 4/ N/a: Not applicable= Data requirement is not necessary for the purposes of this standard.
- 5/ Acute toxicity studies on estuarine fish, shrimp and oysters are required for the citrus, sugarcane and aquatic uses. They may be required for the cotton, corn and soybean uses pending environmental fate data.
- 6/ Freshwater chronic toxicity studies are required for rights-of way, aquatic, corn, soybean, cotton and citrus uses. The invertebrate life-cycle study requirement has been fulfilled. The freshwater fish chronic study is deficient but can fulfill data requirements. An estuarine life-cycle study on mysid shrimp and an early-life stage study on sheepshead minnow may be required for citrus, sugarcane, corn, soybean, cotton and aquatic uses pending results of the acute toxicity estuarine studies and the environmental fate data.
- 7/ An actual aquatic field study may be needed for the aquatic uses pending environmental fate data.
- 8/ Reserved pending development of test methodology.
- 9/ Reserved pending decision as to whether data requirement should be established.

TABLE B
PRODUCT SPECIFIC DATA REQUIREMENTS FOR MANUFACTURING-USE PRODUCTS CONTAINING DIURON

Data Requirement	1/ Composition	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
<u>§158.120 Product Chemistry</u>				
<u>Product Identity</u>				
61-1 - Identity of Ingredients	MP	Partially	00020082 00020122 00028099	Yes ₂ / 3 mos
61-2 - Statement of Composition	MP	No	00017776 00020082 00028099	Yes 6mos
61-3 - Discussion of Formation of Ingredients	MP	No	00020122 05018952	Yes ₂ / 12 mos
<u>Analysis and Certification of Product Ingredients:</u>				
62-1 - Preliminary Analysis	MP	Partially	00017793 00020082	Yes ₃ / 3 mos
62-2 - Certification of Limits	MP	Partially	00020122 00020082	Yes ₃ / 3 mos
62-3 - Analytical Methods for Enforcement of Limits	MP	Yes	GS0046-013	No
<u>Physical and Chemical Characteristics</u>				
63-2 - Color	MP	No	-	Yes ₄ /
63-3 - Physical State	MP	Yes	00017744 00020122	No
63-4 - Odor	MP	No	-	Yes ₄ /

TABLE B
PRODUCT SPECIFIC DATA REQUIREMENTS FOR MANUFACTURING-USE PRODUCTS CONTAINING DIURON

Data Requirement	1/ Composition	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)?
<u>§158.120 Product Chemistry</u> (continued)				
63-7 - Density, bulk density, or specific gravity	MP	Partial	00020122	Yes ⁴ /
63-12 - pH	MP	n/a ⁵ /		
63-14 - Oxidizing or reducing action	MP	No	-	Yes ⁴ /
63-15 - Flammability	MP	n/a		
63-16 - Explosibility	MP	No	-	Yes ⁴ /
63-17 - Storage Stability	MP	Partial	00017744	Yes ⁴ /
63-18 - Viscosity	MP	n/a		
63-19 - Miscibility	MP	n/a		
<u>Other Requirements</u>				
64-1 - Submittal of Samples	Choice			

TABLE B
PRODUCT SPECIFIC DATA REQUIREMENTS FOR MANUFACTURING-USE PRODUCTS CONTAINING DIURON

§158.120 Product Chemistry

- 1/ Composition: MP = Manufacturing-use product; Choice = Choice of several test substances determined on a case-by-case basis.
- 2/ Updated information must be supplied on identity and quantity of impurities and inerts.
- 3/ A certification of ingredient limits must be supplied.
- 4/ Data must be submitted no later than twelve months from the issue date of the guidance package.
- 5/ N/a= Not applicable; Data requirement is not necessary for purposes of this standard.

TABLE B
PRODUCT SPECIFIC DATA REQUIREMENTS FOR MANUFACTURING-USE PRODUCTS CONTAINING DIURON

§158.135 Toxicology
(continued)

- 1/ Composition: MP = Manufacturing-use product.
- 2/ Data must be submitted no later than fourteen months from the issued date of this standard.
- 3/ A test for dermal sensitization will be required unless the Agency receives a study showing lack of sensitization among workers in the manufacturing plant.

TABLE B
PRODUCT SPECIFIC DATA REQUIREMENTS FOR MANUFACTURING-USE PRODUCTS CONTAINING DIURON

Data Requirement	1/ Composition	Does EPA Have Data To Satisfy This Requirement? (Yes, No or Partially)	Bibliographic Citation	Must Additional Data Be Submitted Under FIFRA Section 3(c)(2)(B)? ²
<u>§158.135 Toxicology</u>				
<u>ACUTE TESTING</u>				
81-1 - Oral LD ₅₀ - Rat	MP	Yes	00028006	No
81-2 - Dermal LD ₅₀	MP	Yes	00017795	No
81-3 - Inhalation LC ₅₀ - Rat	MP	No	-	Yes, 14 months
81-4 - Primary Eye Irritation - Rabbit	MP	Yes	00028009	No
81-5 - Primary Dermal Irritation	MP	Yes	00017796	No
81-6 - Dermal Sensitization	MP	No	-	Yes, 14 months ^{3/}

IV. REQUIREMENT FOR SUBMISSION OF PRODUCT-SPECIFIC DATA

Note: This section applies only to manufacturing-use products, not end-use products.

A necessary first step in determining which statements must appear on your product's label is the completion and submission to EPA of product-specific data* listed on the form entitled "Product Specific Data Report" (EPA Form 8580-4, Appendix IV-1) to fill "gaps" identified by EPA concerning your product. Under the authority of FIFRA Section 3(c)(2)(B), EPA has determined that you must submit these data to EPA in order to register or reregister your product(s). All of these data must be submitted not later than six months after you receive this guidance document.

"Product-Specific Data Requirements for Manufacturing-Use Products" appearing in Table B permit you to determine which product-specific data you must submit. This can be done by examining the entries in the column of those tables entitled "Must Data Be Submitted Under §3(c)(2)(B)."

*/ Product specific data pertains to data that support the formulation which is marketed; it usually includes product chemistry data and acute toxicology data.

V. SUBMISSION OF REVISED LABELING AND PACKAGING INFORMATION

Note: This section applies only to manufacturing-use products, not end-use products.

The Agency requires applicants for registration or reregistration to ensure that each label (1) contains accurate, complete, and sufficient instructions and precautions, reflecting the results of data concerning the product and its ingredients, and (2) incorporates labeling format and terminology which are sufficiently standardized to avoid user confusion.

As part of your application, you will be required to submit draft labeling consistent with: applicable product-specific data; the precautionary statements and use directions; and the regulations concerning classification [40 CFR §162.11(c)], packaging [40 CFR §162.16], and labeling [40 CFR §162.10, Appendix V-1 and V-2], as indicated by the following paragraphs of this section of the guidance document.

You will be informed later when you must submit the revised labeling set forth in this guidance package.

A. Label Contents

40 CFR §162.10 (Appendix V-1) requires that certain specific labeling statements must appear at certain locations on the label. This is referred to as format labeling. Specific label items listed below are keyed to Tables D, E, and F (Appendix VI-2).

Item 1. **PRODUCT NAME** - The name, brand, or trademark is required to be located on the front panel, preferably centered in the upper part of the panel. The name of a product will not be accepted if it is false or misleading. See Appendix V-1. [40 CFR §162.10(b)]

Item 2. **COMPANY NAME AND ADDRESS** - The name and address of the registrant or distributor is required on the label. The name and address should preferably be located at the bottom of the front panel or at the end of the label text. See Appendix V-1. [40 CFR §162.10(c)]

Item 3. **NET CONTENTS** - A net content statement is required on all labels. The preferred location is the bottom of the front panel immediately above the company name and address, or at the end of the label text. The net contents must be stated in terms of weight, expressed as avoirdupois pounds

and ounces, and stated in terms of the largest suitable unit, i.e., "1 pound 10 ounces" rather than "26 ounces." In addition to the required units specified, net contents may be expressed in metric units. See Appendix V-1. [40 CFR §162.10(d)]

Item 4. EPA REGISTRATION NUMBER - The registration number assigned to the pesticide product must appear on the label, preceded by the phrase "EPA Registration No.," or "EPA Reg. No." The registration number must be set in type of a size and style similar to other print on that part of the label on which it appears and must run parallel to it. The registration number and the required identifying phrase must not appear in such a manner as to suggest or imply recommendation or endorsement of the product by the Agency. See Appendix V-1. [40 CFR §162.10(e)]

Item 5. EPA ESTABLISHMENT NUMBER - The EPA establishment number, preceded by the phrase "EPA Est." is the final establishment at which the product was produced, and may appear in any suitable location on the label or immediate container. It must also appear on the wrapper or outside container of the package if the EPA establishment registration number on the immediate container cannot be clearly read through such wrapper or container. See Appendix V-1. [40 CFR §162.10(f)]

Item 6. INGREDIENT STATEMENT - An ingredient statement is required on the front panel and must contain the name and percentage by weight of each active ingredient and the total percentage by weight of all inert ingredients. The preferred location is immediately below the product name. The ingredient statement must run parallel with, and be clearly distinguished from, other text on the panel. It must not be placed in the body of other text. See Appendix V-1. [40 CFR §162.10(g)]

Item 6A. POUNDS PER GALLON STATEMENT - For liquid agricultural formulations, the pounds per gallon of active ingredient must be indicated on the label.

Item 7. FRONT LABEL PRECAUTIONARY STATEMENTS - All labels are required to have precautionary statements grouped together on the front panel, preferably within a block outline. The table below shows the minimum type size requirements on various size labels, as set forth in the Regulations.

<u>Size of Label on Front Panel in Square Inches</u>	<u>Signal Word as Re- quired Minimum Type Size All Capitals</u>	<u>"Keep Out of Reach of Children" as Required</u>
5 and under	6 point	6 point
above 5 to 10	10 point	6 point
above 10 to 15	12 point	8 point
above 15 to 30	14 point	10 point
over 30	18 point	12 point

Item 7A. CHILD HAZARD WARNING STATEMENT - All labels are required to have the statement "Keep Out of Reach of Children" located on the front panel above the signal word except where contact with children during distribution or use is unlikely. See Appendix V-1. [40 CFR §162.10(h)(1)(ii)]

Item 7B. SIGNAL WORD - The signal word (Caution, Warning, or Danger) is required on the front panel immediately below the child hazard warning statement. See Appendix V-1. [40 CFR §162.10 (h)(1)(i)]

Item 7C. SKULL & CROSSBONES AND WORD "POISON" - On products assigned a toxicity Category I on the basis of oral, inhalation, or dermal toxicity, the word "Poison" shall appear on the label in red on a background of distinctly contrasting color and the skull and crossbones shall appear in immediate proximity to the word poison. See Appendix V-1. [40 CFR §162.10(h)(1)(i)]

Item 7D. STATEMENT OF PRACTICAL TREATMENT - A statement of practical treatment (first aid or other) shall appear on the label of pesticide products in toxicity Categories I, II, and III. See Appendix V-1. [40 CFR §162.10(h)(1)(iii)]

Item 7E. REFERRAL STATEMENT - The statement "See Side (or Back) Panel for Additional Precautionary Statements" is required on the front panel for all products, unless all required precautionary statements appear on the front panel. See Appendix V-1. [40 CFR §162.10(h)(1)(iii)]

Item 8. SIDE/BACK PANEL PRECAUTIONARY LABELING - The precautionary statements as listed below must appear together on the label under the heading "PRECAUTIONARY STATEMENTS." The preferred location is at the top of the side or back panel preceding the directions for use, and it is preferred that these statements be surrounded by a block outline. Each of the three hazard warning statements must be headed by the appropriate hazard title. See Appendix V-1. [40 CFR §162.10 (h)(2)]

Item 8A. HAZARD TO HUMANS AND DOMESTIC ANIMALS - Where a hazard exists to humans or domestic animals, precautionary statements are required indicating the particular hazard, the route(s) of exposure and the precautions taken to avoid accident, injury or damage. See Appendix V-1. [40 CFR §162.10 (h)(2)(i)]

Item 8B. ENVIRONMENTAL HAZARD - Where a hazard exists to non-target organisms excluding humans and domestic animals, precautionary statements are required stating the nature of the hazard and the appropriate precautions to avoid potential accident, injury, or damage. See Appendix V-1. [40 CFR §162.10(h)(2)(ii)]

Item 8C. PHYSICAL OR CHEMICAL HAZARD

1. Flammability statement. Precautionary statements relating to flammability of a product are required to appear on the label if it meets the criteria in Appendix V-3. The requirement is based on the results of the flashpoint determinations and flame extension tests required to be submitted for all products. These statements are to be located in the side/back panel precautionary statements section, preceded by the heading "Physical/Chemical Hazards." Note that no signal word is used in conjunction with the flammability statements.
2. Criteria for declaration of non-flammability. The following criteria will be used to determine if a product is non-flammable:
 - a. A "non-flammable gas" is a gas (or mixture of gases) that will not ignite when a lighted match is placed against the open cylinder valve.
 - b. A "non-flammable liquid" is one having a flashpoint greater than 350°F (177°C) as determined by the method specified in 40 CFR §163.61-8(c)(13)(ii) of Subpart D.
 - c. A "non-flammable aerosol" is one which meets the following criteria:
 - i. The flame extension is zero inches, using the method specified in 40 CFR §163.61-8(c)(13)(ii);
 - ii. There is no flash back; and
 - iii. The flashpoint of the non-volatile liquid component is greater than 350°F (177°C), determined by the method specified in 40 CFR §163.61-8(c)(13)(i).

3. Declaration of non-flammability. Products which meet the criteria for non-flammability specified above may bear the notation "non-flammable" or "nonflammable (gas, liquid, etc.)" on the label.

It may appear as a substatement to the ingredients statement, or on a back or side panel, but shall not be highlighted or emphasized (as with an inordinately large type size) in any way that may detract from precaution.

4. Other physical/chemical hazard statements. When chemistry data submitted in accordance with 40 CFR §163.61-10(c) demonstrate hazards of a physical or chemical nature other than flammability, appropriate statements of hazard will be prescribed. Such statements may address hazards of explosivity, oxidizing or reducing capability, or mixing with other substances to produce toxic fumes.

Item 9. MISUSE STATEMENT - The following statement is required on your label: "It is a violation of Federal law to use this product in a manner inconsistent with its labeling." See Appendix V-1. [40 CFR §162.10(1)(2)(ii)]

Item 10A. STORAGE AND DISPOSAL BLOCK - All labels are required to bear storage and disposal statements. These statements are developed for specific containers, sizes, and chemical content. Make certain that the statement you use pertains specifically to your product. These instructions must be grouped and appear under the heading "Storage and Disposal" in the directions for use. This heading must be set in the same type sizes as required for the child hazard warning. Refer to Appendix V-5 for the latest specific storage and disposal product label statements.

Item 103. DIRECTIONS FOR USE - Directions for use must be stated in terms which can be easily read and understood by the average person likely to use or to supervise the use of the pesticide. When followed, directions must be adequate to protect the public from fraud and from personal injury and to prevent unreasonable adverse effects on the environment. See Appendix V-1. [40 CFR §162.10]

B. Collateral Information

Bulletins, leaflets, circulars, brochures, data sheets, flyers, and other graphic printed matter which is referred to on the label or which is to accompany the product are termed collateral labeling. Such labeling may not bear claims or representations that differ in substance from those accepted in connection with registration of the product. It should be made part of the response to this notice and submitted for review.

VI. INSTRUCTIONS FOR SUBMISSION

All applications prepared in response to this Notice should be addressed as follows:

Mr. Robert J. Taylor, Product Manager
Registration Division (TS-767)
Office of Pesticide Programs
Environmental Protection Agency
Washington, D.C. 20460
Phone No. (703) 557-1800

- A. For each manufacturing-use product for which continued registration is desired:
1. Within 90 days from receipt of this document, you must submit the "FIFRA Section 3(c)(2)(B) Summary Sheet" EPA Form 8580-1. Refer to Appendix III-2 with appropriate attachments.
 2. Within 6 months from receipt of this document registrants must submit:
 - a. Confidential Statement of Formula, EPA Form 8570-4.
 - b. Product Specific Data Report, EPA Form 8580-4 (Appendix IV-1).
 - c. Two copies of any required product-specific data.
 3. Within the time set forth in Table A, all generic data must be submitted by the affected registrant(s).

Note: If for any reason any required test is delayed or aborted so that meeting the agreed submission time will be delayed, notify the Product Manager listed above.

- B. For each affected product for which continued registration is desired, within 90 days from receipt of this document submit the "FIFRA Section 3(c)(2)(B) Summary Sheet" (EPA Form 8580-1, Appendix III-2) with appropriate attachments.
- C. You will be informed at a later date when you must submit your Application for Amended Pesticide Registration (EPA Form 8570-1) and the revised labeling set forth in this guidance package.

Guide to Use of This Bibliography

1. **CONTENT OF BIBLIOGRAPHY.** This bibliography contains citations of all studies considered relevant by EPA in arriving at the positions and conclusions stated elsewhere in the Standard. Primary sources for studies in this bibliography have been the body of data submitted to EPA and its predecessor agencies in support of past regulatory decisions. Selections from other sources including the published literature, in those instances where they have been considered, will be included.
2. **UNITS OF ENTRY.** The unit of entry in this bibliography is called a "study." In the case of published materials, this corresponds closely to an article. In the case of unpublished materials submitted to the Agency, the Agency has sought to identify documents at a level parallel to the published article from within the typically larger volumes in which they were submitted. The resulting "studies" generally have a distinct title (or at least a single subject), can stand alone for purposes of review, and can be described with a conventional bibliographic citation. The Agency has attempted also to unite basic documents and commentaries upon them, treating them as a single study.
3. **IDENTIFICATION OF ENTRIES.** The entries in this bibliography are sorted numerically by "Master Record Identifier," or MRID, number. This number is unique to the citation, and should be used at any time specific reference is required. It is not related to the six-digit "Accession Number" which has been used to identify volumes of submitted studies; see paragraph 4(d)(4) below for a further explanation. In a few cases, entries added to the bibliography late in the review may be preceded by a nine-character temporary identifier. These entries are listed after all MRID entries. This temporary identifier number is also to be used whenever specific reference is needed.
4. **FORM OF ENTRY.** In addition to the Master Record Identifier (MRID), each entry consists of a citation containing standard elements followed, in the case of material submitted to EPA, by a description of the earliest known submission. Bibliographic conventions used reflect the standards of the American National Standards Institute (ANSI), expanded to provide for certain special needs.
 - a. **Author.** Whenever the Agency could confidently identify one, the Agency has chosen to show a personal author.

as author. As a last resort, the Agency has shown the first submitter as author.

- b. Document Date. When the date appears as four digits with no question marks, the Agency took it directly from the document. When a four-digit date is followed by a question mark, the bibliographer deduced the date from evidence in the document. When the date appears as (19??), the Agency was unable to determine or estimate the date of the document.
- c. Title. In some cases, it has been necessary for Agency bibliographers to create or enhance a document title. Any such editorial insertions are contained between square brackets.
- d. Trailing Parentheses. For studies submitted to the Agency in the past, the trailing parentheses include (in addition to any self-explanatory text) the following elements describing the earliest known submission:
 - (1) Submission Date. The date of the earliest known submission appears immediately following the word "received."
 - (2) Administrative Number. The next element, immediately following the word "under," is the registration number, experimental use permit number, petition number, or other administrative number associated with the earliest known submission.
 - (3) Submitter. The third element is the submitter, following the phrase "submitted by." When authorship is defaulted to the submitter, this element is omitted.
 - (4) Volume Identification (Accession Numbers). The final element in the trailing parentheses identifies the EPA accession number of the volume in which the original submission of the study appears. The six-digit accession number follows the symbol "CDL," standing for "Company Data Library." This accession number is in turn followed by an alphabetic suffix which shows the relative position of the study within the volume. For example, within accession number 123456, the first study would be 123456-A; the second, 123456-B; the 26th, 123456-Z; and the 27th, 123456-AA.

DIURON Bibliography

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Grain Sorghum: Table 13. (Unpublished study received Dec 10, 1964
under unknown admin. no.; CDL: 120137-P)
- 00017886 E.I. du Pont de Nemours & Co. (19??) Recovery Data: Diuron--
Asparagus: Table 15. (Unpublished study received Dec 10, 1964
under unknown admin. no.; CDL: 120137-Q)
- 00017887 E.I. du Pont de Nemours & Co. (19??) Recovery Data: Diuron--
Artichokes: Table 16. (Unpublished study received Dec 10, 1964
under unknown admin. no.; CDL: 120137-R)
- 00017888 E.I. du Pont de Nemours & Co. (19??) Recovery Data: Diuron--
Barley (Grain): Table 17. (Unpublished study received Dec 10, 1964
under unknown admin. no.; CDL: 120137-S)
- 00017889 E.I. du Pont de Nemours & Co. (19??) Recovery Data: Diuron--
Red Clover (Cured Hay): Table 18. (Unpublished study received
Dec 10, 1964 under unknown admin. no.; CDL: 120137-T)
- 00017892 E.I. du Pont de Nemours & Co. (19??) Recovery Data: Diuron--
Macadamia Nuts. (Unpublished study received Oct 28, 1955
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Amount of Residue in Crops Grown in Treated soils. (Unpublished
study received May 5, 1959 under PP0217; CDL:092496-B)
- 00017919 E.I. du Pont de Nemours & Co. (19??) Recovery Data: Diuron--
Added to Apples: Table 21. (Unpublished study received Dec
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New York Agricultural Experiment Station: CDL: 120137-W)

- 00017920 E.I. du Pont de Nemours & Co. (19??) Recovery Data: Diuron--
Added to Pears: Table 22. (Unpublished study received Dec 10,
1964 under unknown admin. no.; CDL: 120137-X)
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Oats, Vetch, Peas--(Seed): Table 23. (Unpublished study received
Dec 10, 1964 under unknown admin. no.; CDL: 120137-Y)
- 00017922 E.I. du Pont de Nemours & Co. (19??) Recovery Data: Diuron--
Oats, Vetch, Hay: Table 24. (Unpublished study received Dec
10, 1964 under unknown admin. no.; CDL: 120137-Z)
- 00017923 E.I. du Pont de Nemours & Co. (19??) Recovery Data: Diuron--
Added to Olives: Table 25. (Unpublished study received Dec 10,
1964 under unknown admin. no.; CDL: 120137-AA)
- 00017924 E.I. du Pont de Nemours & Co. (19??) Recovery Data: Diuron--
Sorghum: Table 26. (Unpublished study received Dec 10, 1964
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- 00017925 E.I. du Pont de Nemours & Co. (1958) Diuron Analytical Data--
Wheat Grain and Straw. (Unpublished study received Dec 10, 1964
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- 00017926 E.I. du Pont de Nemours & Co. (1961) Diuron Residue Data--
Wheat. (Unpublished study received Dec 10, 1964 under unknown
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- 00017927 E.I. du Pont de Nemours & Co. (1961) Diuron Residue Data--
Alfalfa. (Unpublished study received Dec 10, 1964 under unknown
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- GS0046-008 U.S. Environmental Agency (1976) Report on the Toxicity of technical diuron, 95% active ingredient, to rainbow trout. (Unpublished rept. U.S.EPA, Chemical and Biological Investigations Branch, Beltsville, MD. Static jar test #1020, Sept.15, 1976. ID:STODIU04).
- GS0046-009 U.S. Environmental Agency (1979) Report on the survival and reproduction of Daphnia magna exposed to diuron, 95% active ingredient. (Unpublished rept. U.S.EPA, Chemical and Biological Investigations Branch, Beltsville, MD. Life Cycle Test #2418, July 26, 1979 ID:STODIU05).
- GS0046-010 Tucker, R.K.; Crabtree, D.G. (1970) Handbook of Toxicity of Pesticides to Wildlife. Publ.84. Bureau of Sport Fisheries and Wildlife Denver Wildlife Research Center, Fish and Wildlife Service, USDI, Denver, CO ID:STODIU06).
- GS0046-011 Call, D.; Brooke, L.; Kent, R. (1977) Acute and early life stage toxicities, bioconcentration and metabolism of five herbicides in freshwater fish. (Unpublished rept. U.S.EPA, Grant No.R-806196-01, ERL-Duluth ORD, EPA, Duluth, MN. ID:STODIU07).

- GS0046-012 Hodge, H.C.; Downs, W.L. (1964) Chronic Feeding Studies of Diuron in Rats under Petition 5F0432. (Unpublished report by the Dept. of Pharmacology, University of Rochester School of Medicine and Dentistry, Rochester, N.Y. CDL:090467).
- GS0046-013 National Enforcement Investigations Center (NEIC). (1980) HPLC method for analyzing diuron. U.S. Environmental Protection Agency. Denver, CO.

FIFRA SECTION 3(C)(2)(B) SUMMARY SHEET		EPA REGISTRATION NO.
PRODUCT NAME		
APPLICANT'S NAME		DATE GUIDANCE DOCUMENT ISSUED
With respect to the requirement to submit "generic" data imposed by the FIFRA section 3(C)(2)(B) notice contained in the referenced Guidance Document, I am responding in the following manner:		
☐ 1. I will submit data in a timely manner to satisfy the following requirements. If the test procedures I will use deviate from (or are not specified in) the Registration Guidelines or the Protocols contained in the Reports of Expert Groups to the Chemicals Group, OECD Chemicals Testing Programme, I enclose the protocols that I will use:		
☐ 2. I have entered into an agreement with one or more other registrants under FIFRA section 3(C)(2)(B)(ii) to satisfy the following data requirements. The tests, and any required protocols, will be submitted to EPA by:		
NAME OF OTHER REGISTRANT		
☐ 3. I enclose a completed "Certification of Attempt to Enter Into an Agreement with Other Registrants for Development of Data" with respect to the following data requirements:		
☐ 4. I request that you amend my registration by deleting the following uses (this option is not available to applicants for new products):		
☐ 5. I request voluntary cancellation of the registration of this product. (This option is not available to applicants for new products.)		
REGISTRANT'S AUTHORIZED REPRESENTATIVE	SIGNATURE	DATE

**CERTIFICATION OF ATTEMPT TO ENTER
INTO AN AGREEMENT WITH OTHER REGISTRANTS
FOR DEVELOPMENT OF DATA**

(To qualify, certify ALL four items)

1. I am duly authorized to represent the following firm(s) who are subject to the requirements of a Notice under FIFRA Section 3(c)(2)(B) contained in a Guidance Document to submit data concerning the active ingredient:

GUIDANCE DOCUMENT DATE

ACTIVE INGREDIENT

NAME OF FIRM

EPA COMPANY NUMBER

(This firm or group of firms is referred to below as "my firm".)

2. My firm is willing to develop and submit the data as required by that Notice, if necessary. However, my firm would prefer to enter into an agreement with one or more other registrants to develop jointly, or to share in the cost of developing, the following required items or data:

3. My firm has offered in writing to enter into such an agreement. Copies of the offers are attached. That offer was irrevocable and included an offer to be bound by an arbitration decision under FIFRA Section 3(c)(2)(B)(iii) if final agreement on all terms could not be reached otherwise. This offer was made to the following firm(s) on the following date(s):

NAME OF FIRM

DATE OF OFFER

However, none of those firm(s) accepted my offer.

4. My firm requests that EPA not suspend the registration(s) of my firm's product(s), if any of the firms named in paragraph (3) above have agreed to submit the data listed in paragraph (2) above in accordance with the Notice. I understand EPA will promptly inform me whether my firm must submit data to avoid suspension of its registration(s) under FIFRA Section 3(c)(2)(B). (This statement does not apply to applicants for new products.) I give EPA permission to disclose this statement upon request.

TYPED NAME

SIGNATURE

DATE

PRODUCT SPECIFIC DATA REPORT

EPA Registration No. _____ Guidance Document for _____

Date _____

Registration Guideline No.	Name of Test	Test not required for my product listed above (check below)	I am complying with data requirements by		(For EPA Use Only) Accession Numbers Assigned
			Citing MRID#	Submit- ting Data (At- tached)	
\$158.20 PRODUCT CHEMISTRY					
61-1	Identity of ingredients				
61-2	Statement of composition				
61-3	Discussion of formation of ingredients				
62-1	Preliminary analysis				
62-2	Certification of limits				
62-3	Analytical methods for enforcement limits				
63-2	Color				
63-3	Physical state				
63-4	Odor				
63-5	Melting point				
63-6	Boiling point				
63-7	Density, bulk- density, or specific gravity				
63-8	Solubility				
63-9	Vapor pressure				
63-10	Dissociation constant				

PRODUCT SPECIFIC DATA REPORT

EPA Registration No. _____ Guidance Document for _____

Date _____

Registration Guideline No.	Name of Test	Test not required for my product listed above (check below)	I am complying with data requirements by		(For EPA Use Only) Accession Numbers Assigned
			Citing MRID#	Submit- ting Data (At- tached)	
63-12	pH				
63-13	Stability				
63-14	Oxidizing/reducing reaction				
63-15	Flammability				
63-16	Explosibility				
63-17	Storage stability				
63-18	Viscosity				
63-19	Miscibility				
63-20	Corrosion characteristics				
63-21	Dielectric break- down voltage				
\$158.135 TOXICOLOGY					
81-1	Acute oral LD-50, rat				
81-2	Acute dermal LD-50				
81-3	Acute inhalation, LC-50 rat				
81-4	Primary eye irritation, rabbit				
81-5	Primary dermal irritation				
81-6	Dermal sensitiza- tion				

LABELING REQUIREMENTS OF THE FIFRA, AS AMENDED (REFER TO THE SAMPLE LABELS FOLLOWING)

ITEM	LABEL ELEMENT	APPLICABILITY OF REQUIREMENT	PLACEMENT ON LABEL		COMMENTS
			REQUIRED	PREFERRED	
1	Product name	All products 117	Front panel	Center front panel	
2	Company name and address	All products	None	Bottom front panel or end of label text	If registrant is not the producer, must be qualified by "Packed for . . .," "Distributed by . . .," etc.
3	Net contents	All products	None	Bottom front panel or end of label text	May be in metric units in addition to U.S. units
4	EPA Est. No.	All products	None	Front panel	Must be in similar type size and run parallel to other type.
5	EPA Reg. No.	All products	None	Front panel, immediately before or following Reg. No.	May appear on the container instead of the label.
6A	Ingredients statement	All products	Front panel	Immediately following product name	Text must run parallel with other text on the panel.
6B	Pounds/gallon statement	Liquid products where dosage given as lbs. ai/unit area	Front panel	Directly below the main ingredients statement	
7	Front panel precautionary statements	All products	Front panel		All front panel precautionary statements must be grouped together, preferably blocked.
7A	Keep Out of Reach of Children (Child hazard warning)	All products	Front panel	Above signal word	Note type size requirements.
7B	Signal word	All products	Front panel	Immediately below child hazard warning	Note type size requirements.

APPENDIX V-2 (continued)

ITEM	LABEL ELEMENT	APPLICABILITY OF REQUIREMENT	PLACEMENT ON LABEL		COMMENTS
			REQUIRED	PREFERRED	
7C	Skull & crossbones and word POISON (in red)	All products which are Category I based on oral, dermal, or inhalation toxicity	Front panel	Both in close proximity to signal word	
7D	Statement of practical treatment	All products in Categories I, II, and III	Category I: Front panel unless referential statement is used. Others: Grouped with side panel precautionary statements.	Front panel for all.	
7E	Referral statement	All products where precautionary labeling appears on other than front panel.	Front panel		
8	Side/back panel precautionary statements	All products	None	Top or side of back panel preceding directions for use	Must be grouped under the headings in 8A, 8B, and 8C; preferably blocked.
8A	Hazards to humans and domestic animals	All products in Categories I, II, and III	None	Same as above	Must be preceded by appropriate signal word.
8B	Environmental hazards	All products	None	Same as above	Environmental hazards include bee caution where applicable.

APPENDIX V-2 (continued)

ITEM	LABEL ELEMENT	APPLICABILITY OF REQUIREMENT	PLACEMENT ON LABEL		COMMENTS
			REQUIRED	PREFERRED	
8C	Physical or chemical hazards	All pressurized products, others with flash points under 150°F	None	Same as above	
9A	Restricted block	All restricted products	Top center of front panel	Preferably blocked	Includes a statement of the terms of restriction. The words "RESTRICTED USE PESTICIDE" must be same type size as signal word.
9C	Misuse statement	All products	Immediately following statement of classification or ahead of directions for use		
10A	Re-entry statement	All cholinesterase inhibitors	In the directions for use	Immediately after misuse statement	
10C	Storage and disposal block	All products	In the directions for use	Immediately before specific directions for use or at the end of directions for use	Must be set apart and clearly distinguishable from other directions for use.
10D U.S.	Directions for use	All products	None	None	May be in metric as well as U.S. units

PHYSICAL-CHEMICAL HAZARDS

<u>Criteria</u>	<u>Required Label Statement</u>
I. Pressurized Containers	
A. Flashpoint at or below 20°F; or if there is a flashback at any valve opening.	Extremely flammable. Contents under pressure. Keep away from fire, sparks, and heated surfaces. Do not puncture or incinerate container. Exposure to temperatures above 130°F may cause bursting.
B. Flashpoint above 20°F and not over 80°F; or if the flame extension is more than 18 inches long at a distance of 6 inches from the valve opening.	Flammable. Contents under pressure. Keep away from heat, sparks, and flame. Do not puncture or incinerate container. Exposure to temperatures above 130°F may cause bursting.
C. <u>ALL OTHER PRESSURIZED CONTAINERS</u>	Contents under pressure. Do not use or store near heat or open flame. Do not puncture or incinerate container. Exposure to temperatures above 130°F may cause bursting.
II. Non-Pressurized Containers	
A. Flashpoint at or below 20°F.	Extremely flammable. Keep away from fire, sparks, and heated surfaces.
B. Flashpoint above 20°F and over 80°F.	Flammable. Keep away from heat and open flame.
C. Flashpoint over 80°F and not over 150°F.	Do not use or store near heat and open flame.
D. Flashpoint above 150°F.	None required.

STORAGE AND DISPOSAL INSTRUCTIONS FOR PESTICIDES

All products are required to bear specific label instructions about storage and disposal. Storage and disposal instructions must be grouped together in the directions for use portion of the label under the heading STORAGE AND DISPOSAL. Products intended solely for domestic use need not include the heading "STORAGE AND DISPOSAL." The STORAGE AND DISPOSAL heading must appear in the minimum type size listed below:

Size of label front panel in square inches	Required type size for the heading STORAGE AND DISPOSAL (all capitals)
10 and under	.6 point
Above 10 to 15	.8 point
Above 15 to 30	10 point
Over 30.	12 point

Storage and disposal instructions must be set apart and clearly distinguishable from other directions for use. Blocking storage and disposal statements with a solid line is suggested as a means of increasing their prominence.

A. Storage Instructions:

All product labels are required to have appropriate storage instructions. Specific storage instructions are not prescribed. Each registrant must develop his own storage instructions, considering, when applicable, the following factors:

1. Conditions of storage that might alter the composition or usefulness of the pesticide. Examples could be temperature extremes, excessive moisture or humidity, heat, sunlight, friction, or contaminating substances or media.
2. Physical requirements of storage which might adversely affect the container of the product and its ability to continue to function properly. Requirements might include positioning of the container in storage, storage or damage due to stacking, penetration of moisture, and ability to withstand shock or friction.
3. Specifications for handling the pesticide container, including movement of container within the storage area, proper opening and closing procedures (particularly for opened containers), and measures to minimize exposure while opening or closing container.

4. Instructions on what to do if the container is damaged in any way, or if the pesticide is leaking or has been spilled, and precautions to minimize exposure if damage occurs.
5. General precautions concerning locked storage, storage in original container only, and separation of pesticides during storage to prevent cross-contamination of other pesticides, fertilizer, food, and feed.
6. General storage instructions for household products should emphasize storage in original container and placement in locked storage areas.

B. Pesticide Disposal Instructions:

The label of all products, except those intended solely for domestic use, must bear explicit instructions about pesticide disposal. The statements listed below contain the exact wording that must appear on the label of these products:

1. The labels of all products, except domestic use, must contain the statement, "Do not contaminate water, food, or feed by storage or disposal."
2. Except those products intended solely for domestic use, the labels of all products that contain active ingredients appearing on the "Acutely Hazardous" Commercial Pesticide Products List (RCRA "E" List) at the end of this appendix or are assigned to Toxicity Category I on the basis of oral or dermal toxicity, skin or eye irritation potential, or Toxicity Category I or II on the basis of acute inhalation toxicity must bear the following pesticide disposal statement:

"Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance."

The labels of all products, except those intended for domestic use, containing active or inert ingredients that appear on the "Toxic" Commercial Pesticide Products List (RCRA "F" List) at the end of this appendix or presently meet any of the criteria in Subpart C, 40 CFR 261 for a hazardous waste must bear the following pesticide disposal statement:

"Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance."

Labels for all other products, except those intended for domestic use, must bear the following pesticide disposal statement:

"Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility."

3. Products intended for domestic use only must bear the following disposal statement: "Securely wrap original container in several layers of newspaper and discard in trash."

C. Container Disposal Instructions

The label of each product must bear container disposal instructions appropriate to the type of container.

1. All products intended for domestic use must bear one of the following container disposal statements:

Container Type	Statement
Non-aerosol products (bottles, cans, jars)	Do not reuse container (bottle, can, jar). Rinse thoroughly before discarding in trash.
Non-aerosol products (bags)	Do not reuse bag. Discard bag in trash.
Aerosol products	Replace cap and discard containers in trash. Do not incinerate or puncture.

2. The labels for all other products must bear container disposal instructions, based on container type, listed below:

Container Type	Statement
Metal containers (non-aerosol)	Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.
Plastic containers	Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.
Glass containers	Triple rinse (or equivalent). Then dispose of in a sanitary landfill or by other approved state and local procedures.

Appendix V-5
(continued)

Container Type	Statement
Fiber drums with liners	Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused ¹ , dispose of in the same manner.
Paper and plastic bags	Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.
Compressed gas cylinders	Return empty cylinder for reuse (or similar wording).

¹Manufacturer may replace this phrase with one indicating whether and how fiber drum may be reused.

2. The labels for all other products must bear container disposal instructions, based on container type, listed on the first page of this Appendix.

Appendix V-5
(continued)

Pesticides that are hazardous wastes under 40 CFR 261.33(e) and (f) when discarded.

"Acutely Hazardous" Commercial Pesticides (RCRA "E" List)
Active Ingredients, (no inerts):

Acrolein
Aldicarb
Aldrin
Allyl alcohol
Aluminum phosphide
4-Aminopyridine
Arsenic acid
Arsenic pentoxide
Arsenic trioxide
Calcium cyanide
Carbon disulfide
p-Chloroaniline
Cyanides (soluble cyanide salts, not specified elsewhere)
Cyanogen chloride
2-Cyclohexyl-4,6-dinitrophenol
Dieldrin
0,0-Diethyl S-[2-ethylthio)ethyl] phosphorodithioate
(disulfoton, Di-Syston)
0,0-Diethyl 0-pyrazinyl phosphorothioate (Zinophos)
Dimethoate
0,0-Dimethyl 0-p-nitrophenyl phosphorothioate (methyl parathion)
4,6-Dinitro-o-cresol and salts
4,6-Dinitro-o-cyclohexylphenol
2,4 Dinitrophenol
Dinoseb
Endosulfan
Endothall
Endrin
Famphur
Fluoroacetamide
Heptachlor
Hexanethyl tetraphosphate
Hydrocyanic acid
Hydrogen cyanide
Methomyl
alpha-Naphthylthiourea (ANTU)
Nicotine and salts
Octamethylpyrophosphoramide (OMPA, schradan)
Parathion

"Acutely Hazardous" Commercial Pesticides (RCRA "E" List)
Active Ingredients continued:

Phenylmercuric acetate (PMA)
Phorate
Potassium cyanide
Propargyl alcohol
Sodium azide
Sodium cyanide
Sodium fluoroacetate
Strychnine and salts
0,0,0,0-Tetraethyl dithiopyrophosphate (sulfotepp)
Tetraethyl pyrophosphate
Thallium sulfate
Thiofanox
Toxaphene
Warfarin
Zinc phosphide

There are currently no inert ingredients for commercial pesticides on the "Acutely Hazardous" List (RCRA "E" List).

"Toxic" Commercial Pesticide Products (RCRA "F" List)
Active Ingredients:

Acetone
Acrylonitrile
Amitrole
Benzene
Bis(2-ethylhexyl)phthalate
Cacodylic acid
Carbon tetrachloride
Chloral (hydrate)
Chlordane (technical)
Chlorobenzene
4-Chloro-m-cresol
Chloroform
o-Chlorophenol
4-Chloro-o-toluidine hydrochloride
Creosote
Cresylic acid
Cyclohexane
Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[c,d]-pentalen-2-one
(kepone, chlordecone)
1,2-Dibromo-3-chloropropane (DBCP)
Dibutyl phthalate
S-3,3-(Dichloroallyl diisopropylthiocarbamate (diallate, Avadex)
o-Dichlorobenzene
p-Dichlorobenzene
Dichlorodifluoromethane (Freon 12[®])
3,5-Dichloro-N-(1,1-dimethyl-2-propynyl) benzamide (pronamide, Kerb)
Dichloro diphenyl dichloroethane (DDD)
Dichloro diphenyl trichloroethane (DDT)
Dichlorethyl ether
2,4-Dichlorophenoxyacetic, esters and salts (2,4-D)
1,2-Dichloropropane
1,3-Dichloropropane (Telone)
Dimethyl phthalate
Ethyl acetate
Ethyl 4,4'-dichlorobenzilate (chlorobenzilate)
Ethylene dibromide (EDB)
Ethylene dichloride
Ethylene oxide
Formaldehyde
Furfural
Hexachlorobenzene
Hexachlorocyclopentadiene
Hexachloroethane
Hydrofluoric acid



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

CERTIFIED MAIL

SUBJECT: Initiation of Reregistration Process for Pesticide
Products Containing Diuron as the Single Active
Ingredient

Dear Registrant:

In accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, EPA's Office of Pesticide Programs has begun the reregistration process for pesticide products containing the subject ingredient. Significant changes to the statute were made in 1972, 1975, and 1978; thus, current requirements may be substantially different from those in effect at the time your product(s) were registered. The first phase of reregistration requires that you (1) make a commitment to the Agency regarding data development and (2) subsequently submit revised product labeling and associated information.

This mailing contains the Guidance Document for preparation of submissions, as well as a listing of your affected product(s) (Attachment A), and a separate list of registrants with products subject to this standard and which contain this active ingredient (Attachment B). The latter list is for the purpose of cooperative data development.

The Guidance Document sets out the Agency's evaluation of all available data pertaining to the subject chemical and its registered uses, and its rationale for the regulatory actions being taken at this time. Additionally, the Guidance Document contains instructions describing certain of the

steps you must take to maintain registration for your product(s). Products not brought into compliance with the Guidance Document as supplemented by subsequent information from EPA about compliance with certain data support requirements will be subject to suspension and/or cancellation.

Specifically, the enclosed Guidance Document does the following:

1. Introduces the purpose of this document.
2. Explains the Agency's policy regarding data submission and identifies, in table format, the data that must be submitted to complete the Agency's evaluation of each product. In addition, a bibliography identifying the data which is considered part of the data base supporting the registration standard is included.
3. Sets out time-frames for submission of required data.
4. Explains how to revise labeling for manufacturing use products. (As the Guidance Document explains, labeling is not required at this time.)
5. Provides submission instructions.

Because of the variety and complexity of the requirements, and the short statutory time-frames available for certain actions, it is essential that you understand the specific requirements and procedures in order that you may respond in a correct and timely manner. Since a part of these requirements is under Section 3(c)(2)(B) of FIFRA, your first response may be required within 90 days from receipt of this letter. Please note that if you do not respond or do not comply fully with the requirements, your application may be rejected or your product registration cancelled or suspended.

If, after reviewing this material, you do not understand what you must do or how or when you must respond, please contact the Product Manager listed below who will assist you in every reasonable way. If you wish to discuss the data requirements or request that certain data be waived, you must write to the Agency and indicate those data requirements with which you take issue and your rationale for doing so. After the Agency has had a chance to review your submission, the Product Manager will contact you to set up a meeting for the purpose of resolving all issues relative to data requirements.

Please note that this guidance document will eventually be supplemented by EPA with additional information about compliance with data support requirements. In Monsanto v. Administrator, EPA was recently enjoined by the District Court for the Eastern District of Missouri from implementing in any way the "mandatory data licensing" aspects of §3(c)(1)(D) of FIFRA. EPA is assessing the implications of the injunction for the reregistration process. Because of this unresolved situation, EPA has decided to proceed with the requirements in this guidance package which do not relate to the "data licensing" issue and to supplement the package with additional guidance when circumstances permit.

If you have any questions concerning this Guidance Document, you may contact the Product Manager listed below:

Mr. Robert J. Taylor (Product Manager 25)
Registration Division (TS-767)
Office of Pesticide Programs
Environmental Protection Agency
Washington, D.C. 20460
Telephone: 703/557-1800

Sincerely,

Douglas D. Campt, Director
Registration Division (TS-767)

Enclosure